United States
Environmental Protection
Agency

Communications, Education
& Media Relations (1704)

EPA 171-K-99-001
October 1999

National Network for Environmental Management Studies (NNEMS)

PROGRAM CATALOG FY 2000

Undergraduate & Graduate Student Fellowship Program

National Network for Environmental Management Studies (NNEMS) Fellowship Program

CONTENTS

STRUCTURE

Objectives

The Environmental Protection Agency's National Network for Environmental Management Studies (NNEMS) Program is a federal government environmental fellowship program designed to:

- Provide students with a research/training experience
- Promote high-quality research efforts on environmental issues that are directly linked to a thesis or other school-related activity and that are in the interest of the public
- Create a catalyst for increased public awareness of and involvement in environmental issues
- Encourage students to pursue careers in environmental fields

Benefits

To students

- Acquire practical research/training experience
- Be compensated while researching important environmental issues

To universities

- Involve faculty in nationally significant environmental protection issues
- Expand faculty's professional network

GENERAL INFORMATION

Students are invited to submit applications to EPA on the projects contained in this catalog.

Graduate and undergraduate students are eligible to apply. Eligibility guidelines are provided on page 2 in this catalog.

Recipients of fellowships receive a stipend based upon the level of education of the student and the duration and location of the research project.

The fellowships fall within the following categories, and are listed in the back of this catalog:

- Environmental Policy, Regulation, and Law
- Environmental Management and Administration
- Environmental Science
- Public Relations and Communications
- Computer Programming and Development

Applications for projects contained in this catalog will be accepted for consideration if postmarked on or before **January 29, 2000**. *Applications postmarked after January 29, 2000 will **not** be accepted.*

Negotiation

Applications postmarked on or before January 29, 2000 will be reviewed for eligibility requirements and sent to the respective project sponsors and a review panel for consideration. Panels will submit their recommendations to the NNEMS staff and to the project sponsors. Upon review, members of the panel and/or project sponsors may contact the students by phone to negotiate project details. Not all students will be called.

- The EPA sponsor will complete negotiations between sponsors and potential fellows no later than **March 31, 2000**.
- Students who have not been selected for a FY2000 NNEMS fellowship will be notified by mail sent to the permanent address listed on the resume, on or about **April 30, 2000**.

ELIGIBILITY REQUIREMENTS

Note: Federal employees, to include Federal employees on leave without pay status, are not eligible for this fellowship program.

ALL Students Must

- Be a citizen of the United States, its territories or possessions, or be lawfully admitted to the United States for permanent residence.
- Submit one letter of reference from a faculty member or department head very familiar with the student's work and qualifications; the letter must state how the research project will benefit the student's academic studies.

Undergraduate Students Must

- Be enrolled full- or part-time at an accredited institution in an academic program directly related to pollution abatement and control during the tenure of the fellowship.
- Have a 3.0 cumulative grade point average on a 4.0 scale.
- Have already completed four courses relating to the environmental field.
- Seniors who will be graduating prior to the completion of the advertised NNEMS fellowship period are ineligible unless they have been accepted into graduate school and can submit verification.

Graduate Students Must

- Have been accepted to or be enrolled full- or part-time at an accredited institution in an academic program directly related to pollution abatement and control during the tenure of the fellowship.
- Have completed one semester of graduate work or at least four undergraduate courses relating to the environmental field. Students who are entering graduate school (i.e., who have not yet completed one semester of graduate work) will be asked to submit proof of application, acceptance, and enrollment if they are selected for a fellowship.
- Students who will be graduating prior to the completion of the advertised NNEMS fellowship are ineligible.

HOW TO APPLY

There is no limit to the number of applications for projects that a student may submit for consideration.

If more than one application is submitted, please indicate the order of preference for application/ selection.

A complete application package and three (3) photocopies of the complete application package must be submitted <u>for each project</u> for which a student is applying. Any application that is not accompanied by three photocopies of the complete package will not be processed.

Application Materials Required

To apply for a research project, submit the following:

- A complete resume
- NNEMS Liability Agreement (see the Application Materials appendix beginning on page 121 for the forms)
- Official college transcripts for each college or university attended. Photocopies of the official transcript may be made if more than one application is submitted. "Unofficial" transcripts also will be accepted in the case of multiple applications.
- A completed Research Project Proposal form. Proposals must adhere to the format contained in the appendix of this catalog. All required personal information must be included. (See Application Materials.)
- A letter of reference

Applicants must adhere to all eligibility requirements and may be required to provide additional information or documents. Students who are entering graduate school (i.e. who have not yet completed one semester of graduate work) will be asked to submit proof of application, acceptance, and enrollment if they are selected for a fellowship.

Written applications on projects contained in this catalog will be accepted for consideration if postmarked on or before January 29, 2000. Proposals postmarked after January 29, 2000 will not be accepted.

Mail Application Materials To

NNEMS Fellowship Program
Attn: Applications
1400 Spring Street, Suite #310
Silver Spring, MD 20910

Remember to send yor original application packet plus three photocopies.

For further program information, contact your NNEMS coordinator at your university or call Sheri Jojokian, NNEMS Program Manager, (202) 260-5283 between 9:00 am – 5:00 pm EST Monday through Friday. Information may also be obtained via the Internet at EPA's Web site: http://www.epa.gov/enviroed.

Students Selected

Students selected to receive a NNEMS fellowship will be notified by the EPA sponsor. Selected students will receive a stipend for performing their research project. The stipend will be paid out in the form of a grant to the student. The NNEMS staff will send a grant application kit to the student upon selection.

The grant is paid out in equal monthly installments. Each month, the student will receive one fraction of the total grant, based upon the project duration. A final report from the student must be submitted to the student's project sponsor and to the NNEMS staff immediately upon completion of the project period.

While EPA does not withhold any taxes nor generate a W-2 form, the stipend amount is taxable. Students must maintain a record of their stipend amount and file their own taxes. According to the latest Internal Revenue Service (IRS) rules, portions of the stipend may be tax exempt. The IRS recommends students pay taxes quarterly on large stipend amounts to avoid the potential for a penalty at the end of the year. Additional information for filing taxes on a fellowship grant can be located in the NNEMS Program Summary, Appendix B. Please contact the IRS for any further information and instructions needed on filing taxes on a fellowship grant.

NNEMS INSTITUTION NETWORK FY 2000

Alabama A&M University
Dr. Jeanette Jones
Research & Development
PO Box 411
Rm 216, Tatton Hall
Normal, AL 35762

Albion College
Gretchen Coates
KC 4931
Albion, MI 49224

Albright College
Carmen Salisbury
Dept. of Biology
P.O. Box 15234
Reading, PA 19612

American Graduate School of International Management
Karen Frieberg
Department of Internship Education
15429 N. 59th Avenue
Glendale, AZ 85306

American University
Matt McMahon
Office of Student Awards & Fellowships
Career Center
4400 Massachusetts Ave, NW
Washington, DC 20016-8011

Bernard Ross
Department of Public Affairs
4400 Massachusetts Ave, NW
Washington, DC 20016-8070

Antioch New England Graduate School
Tom Wessels, Co-Chair
Dept. of Environmental Studies
40 Avon Street
Keen, NH 03431

Arizona State University
Dr. Charles L. Redman, Director
Center for Environmental Studies
Box 873211
Tempe, AZ 85287-32111

Armenian Assembly of America
Raffi Manoukian
122 C Street, NW
Washington, DC 20001

Auburn University
Dr. Joseph F. Judkins, Jr.
Water Resources Resource Institute
202 Hargis Hall
Auburn, AL 36830

Baldwin-Wallace College
Annie Heidersbach, Director
Career Services
275 Eastland Road
Berea, OH 44017

Barnard College
Jane Celwyn, Office of Career Development
Barnard College, Columbia University
3009 Broadway
New York, NY 10027-6598

Bates College
Charles Kovacs, Director
Office of Career Services
31 Frye Street
Lewiston, ME
04240

Bennett College
Barbara J. Moore, Director
Career Planning & Work Related Exper. Cen.
900 East Washington Street
Greensboro, NC 27401-3239

Bentley College
David Milton
175 Forest St
Waltham, MA 02154-4705

Binghamton University
Burrell Montz
Environmental Studies Department
Binghamton, NY 13902

Barbara M. Friedman, Director
Career Development Center
P.O. Box 6013
Binghamton, NY 13902-6013

Richard Andrus
Environmental Studies Department
Binghamton, NY 13902

Bloomfield College
Office of Career Services
Bloomfield, NJ 07003

Bluefield State College
Dr. Robert Moore, President
219 Rock Street
Bluefield, WV 24701

Mr. Tom Harrison, Director
Career Planning & Placement
219 Rock Street
Bluefield, WV 24701

Boise State University
Richard Rapp
Career Planning Office
1910 University Drive
Boise, ID 83725

Boston College
Ms. Marguerite Connolly
Department of Geology & Geophysics
Devlin Hall, Room 213
Chestnut Hill, MA 02167-3809

Mary Donin, Library Assistant
Career Center
38 Commonwealth Ave
Chestnut Hill, MA 02167

Boston University
R.R. Laksmann
Center for Environmental Studies
675 Commonwealth Ave
Boston, MA 02215

Bowdoin College
Christine DeTroy, Fellowship Coordinator
Career Planning Center
4900 College Station
Brunswick, ME 04011-8440

Bowie State University
Dr. Carl Kirksey, Interim Chair
Department of Natural Sciences/Math
Bowie, MD 29715

Mr. Samuel N. Fontaine, Professor
4006 Rocky Mount Drive
Temple Hills, MD 20748

Bowling Green State University
Dr. Roger Thibault, Director
Center for Environmental Programs
Bowling Green, OH 43403

JoAnn Kroll Career Services
360 Saddlemeir Building
Bowling Green, OH 43403

Bridgewater State College
Brian Savaggio, Director
Career Services
Bridgewater, MA 02325

Arthur Dirks, Acting Dean
School of Arts and Sciences
Bridgewater, MA 02325

Brigham Young University
Dale Wright
Institute of Public Management
760 TNRB
Provo, UT 84602

Brown University
Donna Goodnow
Biology Undergraduate Affairs
Box G-A 124
Providence, RI 02912

Brown University

Harold R. Ward
Center for Environmental Studies
Box 1943
Providence, RI 02912

Mark Kenyon
Career Planning Services
P.O. Box 1907
Providence, RI 02912

Bucknell University

Pamela Keiser, Associate Director
Career Development Office
101 Botany Building
Lewisburg, PA 17836

California Polytechnic State University

Mr. Joel Mann
Political Science Department
San Luis Obispo, CA 93407

California State University, Chico

William Lerch
Office of Experimental Education
Chico, CA 95929-0818

California State University, Fullerton

Michelle Powell
PO Box 34080
Fullerton, CA 92634-9480

California State University, Sacramento

Ms. Pamela King
Cooperative Education Program
Lassen Hall, Rm 2008
6000 "J" Street
Sacramento, CA 95819-6116

Carleton College

Katherine Cooper, Program Coordinator
Career Center, Sayles Hall 050
One North College Street
Northfield, MN 55057-4040

Carnegie Mellon University

Mr. Robert W. Pearson, Director
H. John Heinz III School of
Public Policy and Management
Pittsburgh, PA 15213-3890

Carnegie Mellon University

Indira Nair
Dept of Engineering and Public Policy
Pittsburgh, PA 15213-3890

John Michalenko
Career Center
Pittsburgh, PA 15213-3890

Connie Harrington, Director
H. John Heinz III School of
Public Policy and Management
Student and Employer Services
Pittsburgh, PA 15213-3890

Catholic University of America

Jill Frost, Assistant Director
Office of Legal Career Services, Room 163
Columbus School of Law
Washington, DC 20064-8020

Central Connecticut State University

Linda Sershen
Career Services Center, Willard 100
1615 Stanley Street
New Britain, CT 06050

Chestnut Hill College

Career Services Office
9601 Germantown Avenue
Philadelphia, PA 19118

Cheyney State University

Dr. Douglas Covington, President
Cheyney, PA 19319

Ms. Madeline Johnson, Director
Career Services & Placement Center
Cheyney, PA 19319

City College of New York

Bill Jeanniton
Office of Career Services
NAC Bldg., Room 1/116
138th Street & Covenant Ave.
New York, NY 10031

Dr. Sophia Demetriou
NAC Bldg., Room 1/116
138th Street & Covenant Ave
New York, NY 10031

City University of New York (CUNY)
Dr. Charles Giammona
Office of Academic Affairs
535 East 80 Street
New York, NY 10021

Claremont Graduate University
Carol Geffner, Director
Office of Career Services & Corporate Relations
1017 North Dartmouth
Claremont, CA 91711

Claremont McKenna College
Ms. Gloria Myklebust, Director
Career Development, Heggblade Center
850 Columbia Avenue
Claremont, CA 91711-6420

Clark University
Brian J. Cook
Department of Government
950 Main Street
Worcester, MA 01610-1477

Clark Atlanta University
Dr. Johnny Wilson
240 James P. Brawley Drive, SW
Atlanta, GA 30314

Clarkson University
Gina Lee-Glauser, Director
Division of Research
Box 5630
Potsdam, NY 13699-5630

Gregory Campbell, Dean of Engineering
Attn: Barbara Parker
Box 5700
Potsdam, NY 13699-5700

Clemson University
Alan Elzerman, Dept. Chair
Environmental Systems Engineering
342 Computer Court
Anderson, SC 29625

College of Charleston
Denny Ciganovic, Director of Career Services
66 George Street
Charleston, SC 29424-0001

College of Charleston
Lydia H. Keadle
Internship Coordinator
66 George Street
Charleston, SC 29424-0001

Angela Halfacre
Department of Political Science
66 George Street
Charleston, SC 29424-0001

Colorado College
Cindy Funk, Assistant Director
Career Center
14 Cache La Poudre
Colorado Springs, CO 80903

Colorado State University
Liz White
Career Services Center
176 Lory Student Center
Fort Collins, CO 80523

Colorado State University
Dr. Jeffrey Collett
Department of Atmospheric Science
Ft. Collins, CO 80523-1371

Columbia University in the City of New York
Beth Israel, Director
Office of Projects and Grants
361 Engineering Terrace
New York, NY 10027

Erin Doherty-Ratay, Asst Director of Recruiting
Ofc of Career Svcs, Sch of International & PA
420 W. 118th St., Rm 1406
New York, NY 10027

Community College of Aurora
Wendy Salinas
Financial Aid Dept., Room A104
16000 Centretech Parkway
Aurora, CO 80011

Coppin State University
Dr. Calvin W. Burnett, President
2500 W. North Avenue
Baltimore, MD 21216

Coppin State University
Mr. James Thornton, Director
Career Development
2500 West North Avenue
Baltimore, MD 21216

Cornell College
Jayne Swanson
Career Development Center
600 First Street, West
Mount Vernon, IA 52314-1098

Cornell University
Bridget Foster
University Career Center
103 Barnes Hall
Ithaca, NY 14853

Laurie Ackman
Cornell Institute for Public Affairs
473 Hollister Hall
Ithaca, NY 14853

Tad McGalliard, Education Coordinator
Center for the Environment
Rice Hall
Ithaca, NY 14853-5601

Dartmouth College
Kathryn Hutchinson
Career Services
6208 Collis Center
Hanover, NH 03755-3586

Anne Janeway
Graduate Advising
6208 Collis Center
Hanover, NH 03755-3586

Davidson College
Ann Melton
Career Resources Librarian
P.O. Box 1719
Davidson, NC 28036

Delaware State University
Dr. William B. Delauder, President
1200 North DuPont Highway
Dover, DE 19901

Delaware State University
Dr. Norman Dill
1200 North DuPont Highway
Dover, DE 19901

Mr. Jim Mims, Director
Career Planning and Placement
1200 North DuPont Highway
Dover, DE 19901

Delaware Valley College
Ms. Sarah Behm
Assistant Career Specialist
700 East Butler Avenue
Doylestown, PA 18901-2697

Susan Pachula
700 East Butler Avenue
Doylestown, PA 18901

Denison University
Career Development Center
Granville, OH 43023

DePauw University
Mr. Tom Cath, Director
Career Planning & Placement
408 South Locust St, Union Building
Greencastle, IN 46135-0037

Drew University
Bonnie Hayes
Academic Internship Office
Madison, WI 07940

Drexel University
Charles Haas
Dept of Civil & Architectural Engineering
32nd and Chestnut Streets
Philadelphia, PA 19104

Aminta G. Hawkins
Career Services Center
32nd and Chestnut Streets
Philadelphia, PA 19104

Michael Gealt, Director
Environmental Studies Institute
32nd and Chestnut Streets
Philadelphia, PA 19104

Drexel University
Susan Killen
Dept of Biological Sciences & Technology
32nd and Chestnut Streets
Philadelphia, PA 19104

Duke University
Ms. Julie Kovach
Sanford Institute of Public Policy
Box 90247
Durham, NC 27708

Karen George-Kirchoff
School of Environment
Box 90331
Durham, NC 27708-0331

Diane Poe
Career Development Center
Undergraduate Studies
110 Page Hall
Durham, NC 27706

Duquesne University
Ms. Anne Gyurisin, Director
Career Service Center
G-1 Rockwell Hall
Pittsburgh, PA 15282-0100

East Tennessee State University
Dan J. Emmel
Office of Career Development
P.O. Box 70718
Johnson City, TN 37614

Eckerd College
Mary Rongey
4200 54th Avenue, South
St. Petersburg, FL 33711

Elmira College
Dr. William D. Couchon, Director
Office of Counseling & Career Services
One Park Place
Elmira, NY 14901-9986

Emory University
Larisa Slaughter
Career Center
1784 N. Decatur Road, Suite 200
Atlanta, GA 30322

Environmental Careers Organization
Northeast Regional Office
179 South Street, FL5
Boston, MA 02111-2729

Florida International University
Department of Public Health
North Miami Campus
North Miami, FL 33181

Olga Magnusen
Career Planning & Placement
University Park Campus
Miami, FL 33191

Florida State University
Susan Epstien
Career Center
4th Level, University Center
Tallahassee, FL 32306-1035

Franklin & Marshall College
Prof. Sharon Moran
Environmental Studies Program
Lancaster, PA 17603

Frostburg State University
Sharon Allen
Career Services
107 Pullen Hall
Frostburg, MD 21532

George Mason University
Bev Stennett, Career Consultant
Career Development Center
Mail Stop 3B6
Fairfax, VA 22030-4444

George Washington University
Johanna Mayo
Career & Cooperative Ed. Center
801 N.W. 22nd Street, Suite T509
Washington, DC 20052

Department of Public Administration
2115 G Street, N.W., Monroe 302
Washington, DC 20052

Gordon College
Cheryl Clayton
255 Grapevine Rd.
Wenham, MA 01984

Grambling State University
Career Planning & Placement
P.O. Drawer F
Grambling, LA 71245

Grinnell College
Lynn Stafford
Career Development Office
P.O. Box 805
Grinnell, Iowa 50112-0810

Guilford College
Ms. Judy Harvey, Director
Internships and Service Learning
5800 West Friendly Avenue
Greensboro, NC 27410

Gustavus Adolphus College
Jennifer Kaysen, Internship Director
Career Center
800 W. College Avenue
St. Peter, MN 56082

Hamilton College
Ms. Virginia Zombeck, Program Coordinator
The Maurice Horowith Career Center
198 College Hill Road
Clinton, NY 13323

Hampton University
Dr. Babasemi Adesanya
Environmental Information Center
East Queen Street
Hampton, VA 23668

Dr. Ben Cuker
Marine & Environmental Science Program
Hampton, VA 23668

Leonard Jones
Office of Career Planning & Placement
Hampton, VA 23668

Ms. Betsy Willis, Director
Career Counseling & Placement
Hampton, VA 23668

Harvard University
Jennifer Armini
Office of Career Services
79 JFK Street
Cambridge, MA 02138

Haverford College
Division of Financial Aid
Haverford PA 19041-1392

Julio DePaula
Department of Chemistry
Haverford, PA 19041

Herbert H. Lehman College
Ms. Nancy Cintron, Director
Career Services
250 Bedford Park Blvd W.
Bronx, NY 10468

Hiram College
Martin Huehner
Professor of Biology
Hiram, OH 44234

Kathryn Craig
Director of Career Services
Hinsdall Hall, Suite 101
Hiram, OH 44234

Hofstra University
Dr. Russell Burke
Department of Biology
114 Hofstra University
Hempstead, NY 11549

Howard University
Mr. Samuel Hall
Career Services Office
2400 Sixth Street, N.W.
Washington, DC 20059

Idaho State University
Paul D. Tate
Office of Graduate Studies & Research
Pocatello, ID 83209

Illinois Wesleyan University
Ann Harding, Internship Coordinator
109 E. University St., P.O. Box 2900
Bloomington, IL 61701

Indiana & Purdue University, Indianapolis
Karen D. Marks
Career & Employment Svcs
Business/SPEA Building 2010
801 West Michigan Street
Indianapolis, IN 46202-5153

Indiana University
Dick McGarvey
SPEA 200
Bloomington, IN 47405

Karen Bazur
SPEA
Room 200
Bloomington, IN 47405

Iowa State University
Thane J. Peterson
Office of Sponsored Programs
221 Beardshear Hall
Ames, Iowa 50011-2020

Mr. Chris Baldwin
Dept. of Chemical Engineering
1037 Sweeney Hall
Ames, IA 50011

Ithaca College
Antoinette DiCiaccio
Career Planning & Placement
1101 Gannett Center
Ithaca, NY 14850-7114

Jackson State University
Obra Hackett
Career Planning & Placement
1400 John R. Lynch Street
Jackson, MS 39217

Dr. Jonathan Wilson
Dept of Marine Biology
P.O. Box 18540
Jackson, MS 39217

James Madison University
Dr. Robert Roberts
Department of Political Science
Harrisonburg, VA 22801

Johns Hopkins University
Ms. Ann Harrell, Program Assistant
Career & Life Planning Center (Downtown)
1 Charles Plaza (2nd Level)
Charles & Saratoga Sts
Baltimore, MD 21201-3933

Dr. Bjorn Gunnarsson, Assoc. Prog. Chair
Environmental Science Program
321 Olin Hall
3400 N. Charles Street
Baltimore, MD 21218-2685

Ms. Angel Burgos, Program Coordinator
Institute for Policy Studies
Wyman Park Building
3400 North Charles Street
Baltimore, MD 21218-2696

Johns Hopkins-SAIS
Eric Wesselman, Administrator
Office of Career Services
1740 Massachusetts Ave., N.W.
Washington, DC 20036

Kathryn Rossie
School of Arts and Sciences
1619 Massachusetts Ave., N.W.
Washington, DC 20036

Kansas State University
Linda Lake, Records Assistant
Landscape Arch./Reg. & Community Planning
302 Seaton
Manhattan, KS 66506-2909

Beverly Page
Preaward Services
2 Fairchild Hall
Manhattan, KS 66506-1103

Langston University
Sherman Lewis
Langston, OK 73050

LaSalle University
School of Arts & Sciences
Philadelphia, PA 19141

LaSalle University
Trish Schaffer
Career Planning & Placement Office
Philadelphia, PA 19141

Lawrence University
Michelle Perreault, Internship Coordinator
Career Center
P.O. Box 599
Appleton, WI 54912-0599

Lehigh University
Marietta Coleman, Asst Director
Graduate Advancement Whitaker Lab
318 #5 East Packer Avenue
Bethlehem, PA 18015-3171

Mr. Harvey Stenger
Environmental Studies & Career Services Center
14 East Packer Avenue
Bethlehem, PA 18015-3171

Lincoln University
Student Employment Office
Lincoln Hall, Room 104
Lincoln University, PA 19352

Ms. Rhonda Morris, Director
Career Counseling
Lincoln University, PA 19352

Long Island University at Southampton
Noreen McKenna
Associate Director of Cooperative Education
239 Montauk Highway
Southampton, NY 11968-4198

Louisiana State University
R. Eugene Turner
Department of Oceanography
Baton Rouge, LA 70803

Loyola College (MD)
Dr. Melvin Miller
Department of Chemistry
Baltimore, MD 21210

Loyola University
Christopher Flynn
Career Center
P.O. 208, Box 200
New Orleans, LA 70118

William T. Cotton, Director
University Honors Program
Campus Mail Box 75
6363 St. Charles Avenue
New Orleans, LA 70118

Macalester College
Aldemaro Romero
Environmental Studies
1600 Grand Avenue
St. Paul, MN 55105-1899

Massachusetts Institute of Technology
Mr. Brima Wurie
Administrator for Fellowship Programs
77 Massachusetts Ave., Rm 3-138
Cambridge, MA 02139-4307

McNeese State University
Dr. Gale Haigh
Department of Biology
P.O. Box 9200
Lake Charles, LA 70609

Mercy College
Ms. Jeane Harris, Director
Career Development Center
555 Broadway, Room 117
Dobbs Ferry, NY 10522

Miami of Ohio University
Vincent Hand
Institute of Environmental Sciences
102 Boyd Hall
Oxford, OH 45056

Michigan State University
Jody Olsen
Department of Resource Development
331 Natural Resources Building
East Lansing, MI 48824-1222

Michigan Technological University

David Hand
1400 Townsend Drive
Houghton, MI 49931

Betty Gaff
Career Center
1400 Townsend Drive
Houghton, MI 49931

Middlebury College

Claire Tetrault, Internship Coordinator
Career Counseling & Placement
Middlebury, VT 05753-6111

Mississippi State University

Ms. Robyn B. Remotique
Sponsored Programs Administration
P.O. Box 6156
Mississippi State, MS 39762

Montana State University, Bozeman

Alyce M. Maas, Career Counselor
Career Services
125 Strand Union
Bozeman, MT 59717-0406

Morgan State University

Felicia Moutry
Career Development Center
Cold Spring Lane & Hillen Road
Baltimore, MD 21239

Dr. Joanne Robinson
Biology Department
Cold Spring Lane & Hillen Road
Baltimore, MD 21239

Ms. Deborah Branch, Director
Career Planning & Placement
Cold Spring Lane & Hillen Road
Baltimore, MD 21239

Muhlenberg College

Patricia Bradt
Environmental Science Dept.
2400 Chew Street
Allentown, PA 18104

New Jersey Graduate Program

George G. Rhoads
Public Health Department
P.O. Box 1179
681 Frelinghuysen Road
Piscataway, NJ 08855-1179

New Jersey Institute of Technology

Dr. Joel Bloom
Vice President, Academic Support Programs
University Heights
Newark, NJ 07102

New Jersey Institute of Technology

Mary Jane Pohero
N.E. Hazardous Substance Research Center
138 Warren Street
Newark, NJ 07102

New Mexico State University

Ron K. Bhada
WERC
P.O. Box 30001, Dept. WERC
Las Cruces, NM 88003-0001

Norfolk State University

Dr. Harrison B. Wilson, President
2401 Corprew Avenue
Norfolk, VA 23504

Col. Benjamin Ellis, Director
Placement Office
2401 Corprew Avenue
Norfolk, VA 23504

North Carolina A&T University

Dr. Ernestine Psalmonds
Vice Chancellor for Research
Suite 305, Dowdy
Greensboro, NC 27411

Dr. Doretha Roushee
Biology Department
1611 East Market Street
Greensboro, NC 27411

North Carolina Central University

Peggy Watson-Borden
Career Planning and Placement
1801 Fayetteville Street
Durham, NC 27707

North Carolina State University
David M. Shafer
Graduate School
Box 7102
Raleigh, NC 27695-7908

Northeastern Illinois University
Valerie Schiller
5500 North Louis Avenue
Chicago, IL 60625-2868

Northeastern University
Carol Lyons
Career Services Center
120 Ryder Hall
Boston, MA 02115

Northern Arizona State University
Celeste Biles
Box 5640
Flagstaff, AZ 86011

Wilma Ennenga
Office of Grants and Contract Services
Box 4130
Flagstaff, AZ 86011

Northwestern University
Dianne Sickmann, Coordinator
Student Employment Program
Scott Hall, Rm 29
601 University Place
Evanston, IL 60208

Oberlin College
Delores Whitney
Office of Career Services
155 North Professor Street
Oberlin, OH 44074

Ohio University
Patricia Finnearty
Career Services
185 Lindley Hall
Athens, OH 45701-2979

Oklahoma State University
Dr. Ed Knobbe, Director
Environmental Institute
003 Life Sciences East
Stillwater, OK 74074

Oklahoma State University
Mark Cox
Dept. of Occupational & Environmental Health
801 N.E. 13th Street, Room 419
Oklahoma City, OK 73104

Old Dominion University
Frederick Watson
Career Services, Webb University Center
Second Floor, North Wing
Norfolk, Virginia 23529-0524

Oregon State University
Ms. Sandra Woods, Associate Professor
Department of Civil Engineering
Apperson Hall 202
Corvallis, OR 97331-2302

Ms. Stacy Gaylord, Advisor
Environmental Science Program
Cordley Hall 2082
Corvallis, OR 97331

Anna Harding
Department of Public Health
Waldo Hall, 309
Corvallis, OR 97331-6406

Mike Unsworth
Center for Analysis & Environmental Change
Weniger Hall 283
Corvallis, OR 97331-6511

Ms. Wanda Crannell
Bioresource Research Program
Agriculture & Life Sciences Bldg, Rm 4017
Corvallis, OR 97331

Ms. Cheryl Kolbe, Head Advisor
Dept of Agricultural & Resource Economics
Ballard Extension Hall
Corvallis, OR 97331

Mr. Tom Savage
Department of Animal Sciences
Withycombe Hall
Corvallis, OR 97331-6702

Diane Dungan
Career Planning & Placement Center
Administrative Services B008
Corvallis, OR 97331-2127

Oregon State University

Ms. Victoria A. Linehan
Advising Specialist
Biology/Environmental Sciences Programs
2042 Cordley Hall
Corvallis, OR 97331-2902

Pace University

Dr. Barry Miller, Associate Director
Career Services
41 Park Row, 14th Floor
New York, NY 100381

Penn State University

Career Development & Placement Services
217 Ritenour Building
University Park, PA 16802

Brian Dempsey
Department of Civil Engineering
University Park, PA 16802

Susan Knell
Eberly College of Science
University Park, PA 16802

Frank M. Goode
Dept. of Agricultural Economics/Rural Sociology
112 C. Armsby Building
University Park, PA 16802

Dr. Archie J. McDonald
Environmental Resources
Land and Water Research Building
University Park, PA 16802

Robert Shannon
Dept. of Ag. & Biol. Eng.
Dept. of Env'l Res. Mgmt.
233 Agricultural Engineering Bldg.
University Park, PA 16802

Penn State University-Abington

Alice Sayles
Office of Continuing Education
1600 Woodland Road
Abington, PA 19001

Pepperdine University

Nan Papenhausen
Director, Recruitment and Placement
School of Public Policy
24255 Pacific Coast Highway
Malibu, CA 90263-7490

Philadelphia College of Pharmacy & Science

Kevin Wolbach
600 S. 43rd Street
Philadelphia, PA 19104

Piedmont College

Tom Miles, Director
Career Center
P.O. Box 10
Deforest, GA 30535

Pomona College

Ms. Jan Morimoto
Career Development Office
575 North College Way
Claremont, CA 91711

Fellowships & Scholarships
Office of Career Development
170 E. Sixth Street, Suite 148
Claremont, CA 91711-6392

Kristen Romero
Career Development Office
333 N. College Way
Claremont, CA 91711

Portland State University

Dr. James Pratt
Environmental Science & Resources Program
P.O. Box 751
Portland, OR 97207-0751

Princeton University

Dr. Ann D. Corwin
Woodrow Wilson School
Robertson Hall
Princeton, NJ 08544-1013

Principia College

Taylor Delaney
Biology/Environmental Sciences Dept.
Elsah, IL 62028

Purdue University

Jane Alexander, Office of Student Services
Forestry & Natural Resources
1159 Forestry Building
West Lafayette, IN 47907-1159

Jeff R. Wright
School of Civil Engineering
1284 WRRC
West Lafayette, IN 47907

Shirl Barker
NRES Program
School of Agriculture
West Lafayette, IN 47907

Chris J. Johannsen
Natural Resources Research Inst.
1158 ENTM 220
West Lafayette, IN 47907-1158

Queens College of the University of New York

Ms. Laura A. Funk
Office of Honors and Scholarships
Powdermaker Hall, Rm 119
65-30 Kissena Blvd
Flushing, NY 11367-1597

Radford University

Dr. Sally Dennis
Biology Department
304 Reed Hall, Box 6931
Radford, VA 24142

Regent University

Ms. Kristine Bramsen
Robertson School of Government
1000 Regent University Drive
Virginia Beach, VA 23464-9885

Rensselaer Polytechnic Institute

Patricia Doyle
Career Development Center
Troy, NY 12180

Mr. Frank Mendelson
Environmental Management & Policy Program
Sage 2502
Troy, NY 12180-3590

Rice University

Oralia M. Rios-Nunez, Career Svcs Center
Rice Memorial Center, 2d Floor, MS 521
6100 Main Street
Houston, TX 77005

Richard Stockton College

Mike Geller
NAMS
Pomona, NJ 08240

Rider College

School of Liberal Arts and Sciences
2083 Lawrenceville Road
Lawrenceville, NJ 08648-3099

Rochester Institute of Technology

Office of Cooperative Education & Placement
Bausch & Lomb Center
57 Lomb Memorial Drive
Rochester, NY 14623-5603

George Crowley
Cooperative Education & Placement Office
P.O. Box 9887, Bausch & Lomb Center
Rochester, NY 14623-0887

Rogers State University

Brett Campbell, Director
Student Affairs Office, Claremore Campus
1701 W. Will Rogers Boulevard
Claremore, OK 74017-3252

Rutgers University

Dr. Alan Appleby
Dept of Environmental Services, Cook College
P.O. Box 231
New Brunswick, NJ 08903

Joe Broderick
Office of Research & Sponsored Programs
ASB Annex II, Busch Campus, P.O. Box 1179
Piscataway, NJ 08855-1179

Dr. Guanaccia
Department of Human Ecology, Cook College
P.O. Box 231
New Brunswick, NJ 08903

Rutgers University

Janet Jones
Busch Livingston Reg. Ofc., Career Services
Busch Campus Center, Bartholomew Road
Piscataway, NJ 08855-1179

Carol Rutgers
Cooperative Education, Cook College
P.O. Box 231
New Brunswick, NJ 08903-0231

Greg Sobol
Douglas/Cook Regional Office, Career Services
61 Nichol Avenue
New Brunswick, NJ 08903

Richard L. White
Career Services
56 College Avenue
New Brunswick, NJ 08903

Saint Ambrose University

Bill Lynn
518 West Locust
Davenport, IA 52803

Saint Augustine's College

Gywn Newsome
Career Planning & Placement
1315 Oakwood Avenue
Raleigh, NC 27610-2298

Saint Cloud State University

Andrew P. Ditlevson
Career Services
720 Fourth Avenue South
St. Cloud, MN 56301-4498

Saint Joseph University

Financial Aid Office
5600 City Avenue
Philadelphia, PA 19131

Saint Louis University

Alisa Reichman
Career Center
221 N. Grand, Suite 150
St. Louis, MO 63103

Saint Mary's College of Maryland

Stephanie Slater, Assistant Director
Career Services
St. Mary's City, MD 20686

Saint Mary's University

Brother Craig Franc, Vice President
700 Terrace Heights, #30
Winona, MN 55987

Saint Norbert College

Carol Komsi
Career Services
JMS 106, 100 Grant St.
De Pere, WI 54115

Saint Paul's College

Dr. Frank Conteh
Environmental Studies/Dept. of Humanities
406 Windsor Avenue
Lawrenceville, VA 23868

Mr. Frank Hendrick, Director
Career Planning & Placement
406 Windsor Avenue
Lawrenceville, VA 23868

Salisbury State University

Dr. Becky Emery
Career Services
1101 Camden Avenue
Salisbury, MD 21801

Samford University

Alice Martin, Director
Career Development Center
Birmingham, AL 35229-2276

San Jose State University

Deborah Weakland
Career Center
One Washington Square
San Jose, CA 95192-0032

Scott Community College

Mark Aronson
Department of Biology
500 Belmont Road
Bettendorf, IA 52722

Scripps College
Women's Collective
1030 Columbia Avenue
Claremont, CA 91711

Sewanee, The University of the South
Ms. Julie King Murphy, Director
Career Services
735 University Avenue
Sewanee, TN 37383-1000

Shepherd College
Donna Daugherty, Program Coordinator
Cooperative Education
Shepherdstown, WV 25443

Simmons College
Elaine Goldman, Associate Director
Career Services
300 The Fenway
Boston, MA 02115

Society of Hispanic Professional Engineers, The
Mr. Frank C. Rios, President
Greater Philadelphia Chapter
P.O. Box 1497
Philadelphia, PA 19105

South Carolina State University
Stacey Settle
Director of Student Services
P.O. Box 7176
Orangeburg, SC 29117

South Dakota State University
Mr. Roger Sandness
College of Arts & Science
Scobey Hall 232
Brookings, SD 57007-0648

Southern Illinois University (Carbondale)
Carol Zakmary
NPA Program
Carbondale, IL 62901

Marvin E. Nowicki
Department of Political Science
Carbondale, IL 62901-4501

Southern Oregon State College
Darlene Southworth, Professor
Department of Biology
1250 Siskiyou Boulevard
Ashland Oregon 97520-5071

Southern University
Dr. Robert Ford
Center for Energy & Environmental Studies
P.O. Box 9764
Baton Rouge, LA 70813

Stanford University
Cherene Marchant
Career, Planning & Placement Center
Stanford, CA 94305-3081

State University of New York at Buffalo
Ms. Judy Jankowsky, Career Resource Librarian
Car. Plng & Placement, Div. of Stu. Affairs
259 Capen Hall, Box 601635
Buffalo, NY 14260-1635

State University of New York at Buffalo
Mary C. Dahl
Career Resource Librarian
259 Capen Hall, Box 601635
Buffalo, NY 14260-1635

State University of New York at Geneseo
Michelle Larose, Career Counselor
Career Services Office
Blake A 104
Geneseo, NY 14454

State University of New York at Syracuse
Dr. Helmut Resch
Research Office, SUNY/ESF
200 Bray Hall
Syracuse, NY 13120

State University of New York, Stony Brook
Peter M. Saal
Research Resources Center
S-5421 Frank Melville, Jr. Memorial Library
Stony Brook, NY 11794-3364

Dr. Bruce Brownawell
Marine Sciences Research Center
Stonybrook, NY 11794-5000

Staten Island, The College of
Carol Watkins
1A-105
2800 Victory Blvd.
Staten Island, NY 10301

Susquehanna University
Ms. Kimberly Bolig, Assoc. Director
Center for Career Services
514 University Avenue
Selinsgrove, PA 17870

Swarthmore College
Jane Z. McGarity
Career Planning & Placement
500 College Avenue
Swarthmore, PA 19081-1397

Sweetbriar College
Environmental Studies
Sweetbriar, VA 24595

Syracuse University
Anne Stewart
Department of Public Administration
214 Maxwell Hall
Syracuse, NY 13244-1090

Temple University
Robert Mason
Department of Geography
309 Gladfeller Hall
Philadelphia, PA 19122

Mr. David Smedley
Financial Aid Office
Cornwell Hall
Philadelphia, PA 19122

Tennessee State University
Dr. Edward L. Risby
Graduate Studies & Research
3500 John A. Merritt Blvd.
Nashville, TN 37209

Texas A&I University
Dr. R. N. Finch
Dept. of Chemical/Natural Gas Engineering
Campus Box 193
Kingsville, TX 78363

Texas A&M University
Ms. Rebecca K. Sharp
Col. Ag. & Life Sci., Plant Path. & Micro. Dept.
120 Peterson
College Station, TX 77843-2132

Dr. Roy W. Hann
Environmental Engineering Dept.
College Station, TX 77843

Texas Southern University
Harry Clark, Planning & Placement
Cooperative Education Center
3000 Cleburne Street
Houston, TX 77004

Texas Tech University
Dr. Lloyd Urban
Water Resources Dept.
Box 41022
Lubbock, TX 79409-1022

Texas Wesleyan School of Law
Linda S. Shelby, Director
1515 Commerce Street
Fort Worth, TX 76102-6509

Towson State University
Ms. Amy Pearce
Career Center
8000 York Road
Towson, MD 21252

Trenton State College
Barbara Clancey
Office of Career Services
Hillwood Lakes, CN 4700
Trenton, NJ 06850-4700

Tufts University
Sheldon Krimsky
Dept. of Urban/Environmental Studies Dept.
97 Talbot Avenue
Medford, MA 02155

Michael Reed
Dept. of Biology
Medford, MA 02155

Tufts University

Kerry Santry, Acting Director
Tufts University Career Planning Center
226 College Avenue
Medford, MA 02155

Tulane University

Terry Brown
Office of Research
327 Gibson Hall
6823 St. Charles Ave.
New Orleans, LA 70118

Jamie Lax, Assistant Director
Career Services Center
University Center, Suite 73
New Orleans, LA 70118

Tulane University Medical Center

Dr. Robert Reimers
Dept. of Environmental Health Sciences SL29
1430 Tulane Avenue
New Orleans, LA 70112-2699

Tuskegee University

Dr. Maurice Maloney
Department of Agricultural Sciences
Tuskegee, AL 36088

University of Alaska

Career Services Center
3211 Providence Drive
Anchorage, AK 99508

University of Alaska, Fairbanks

Raymond C. Highsmith, Director
West Coast National Undersea Research Center
School of Fisheries & Ocean Studies
Fairbanks, AK 99775-7220

University of Arizona

John Luhman
Career Center
4400 Massachusetts Avenue
Washington, DC 10016-8011

Bill Ruggirello
Career Center
Old Main, Room 104
Tucson, AZ 85721

University of Arizona

Susan Hogan
Career Center
4400 Massachusetts Avenue
Washington, DC 10016-8011

University of Arkansas, Little Rock

Dr. Carl Stapleton
Dept. of Environmental Health
2801 S. University Avenue
Little Rock, AR 72204

University of California, Berkeley

Ms. Susan Kishi, Career Advisor
Career & Graduate School Services
2111 Bancroft Way, #4350
Berkeley, CA 94720-4350

Julia Harty
Cal in the Capital, Alumni House
Berkeley CA 94702

Lisa Shuldberg
Graduate School of Public Policy
2607 Hearst Ave
Berkeley, CA 94720

Ms. Jane Adams
Career & Graduate School Services
2111 Bancroft Way, #4350
Berkeley, CA 94720-4350

University of California, Davis

Ms. Marg Lee, Coordinator
Internship & Career Center
2nd Floor, South Hall
Davis, CA 95616-8625

Environmental and Resources Sciences
Internship and Career Center
211 South Hall
Davis, CA 95616

University of California, Irvine

Robert Gomez
Career Planning & Placement Center
Irvine, CA 92717

University of California, Irvine

Said M. Shokair, Director
Undergraduate Research Opportunities Program
Student Services II, Suite 1100
Irvine, CA 92697-5685

University of California, Los Angeles

Graduate Admissions Dept.
5531 Boelter Hall
Los Angeles, CA 90095-1592

University of California, Riverside

Deborah McCoy
Career Services Center
Veitch Student Center, N.W. Wing
Riverside, CA 92521-0211

Deborah Norden
Dept. of Political Science
Riverside, CA 92521-0211

University of California, San Diego

Christine Alexander, Internship Coordinator
Career Services, Department 0335
9500 Gilman Drive
La Jolla, CA 92093-0335

Randon E. Woodard, Asst. Director
Student Activities & Government
9500 Gilman Drive
LaJolla, CA 92093-0077

Ms. Kristen Bubb, Internship Counselor
Academic Internship Program
9500 Gilman Drive
LaJolla, CA 92093-0422

University of California, Santa Barbara

Sheryl Reimers, Assistant Director
Graduate Admissions & Financial Support
Graduate Division, 3117 Cheadle Hall
Santa Barbara, CA 93106

University of California, Santa Cruz

Christie Danner
Career Resources Librarian
1156 High Street
Santa Cruz, CA 95064

University of California, Santa Cruz

Caroline Berger
Environmental Studies Internship
Santa Cruz, CA 95064

University of Chicago

Kelly Humphry
Environmental Center
5706 S. University Avenue, #002a
Chicago, IL 60637

Prof. Joseph V. Smith
Department of Geophysical Science
5801 S. Ellis Avenue
Chicago, IL 60637

Stacey Myton, Internship Coordinator
Career and Placement Services
1212 East 59th Street
Chicago, IL 60637

University of Cincinnati

Kathy Grant, Director
Career Planning Center
College of Law, ML #040
Cincinnati, OH 45221-0040

University of Colorado at Boulder

Judith Moore
Career Services Center
Willard Hall
Campus Box 133
Boulder, CO 80309-0133

University of Connecticut

Larry Druckenbrod, Career Consultant
Dept. of Career Services
233 Glenbrook Rd., U-57
Storrs, CT 06269

David B. Schroeder, Department Head
Natural Resources Management
Young Bldg, Rm. 306, U-51
Storrs, CT 06269

University of Dayton

Dr. Steven Safferman, Asst. Professor
Dept. Civil & Environmental Eng. Mechanics
300 College Park
Dayton, OH 45469-0243

University of Delaware

John Byrne, Director
Center for Energy & Env'l Policy
Newark, DE 19716-7301

University of Delaware

Jeff Raffel
Newark, DE 19716-7301

Dr. Tom Sims, College Architectural Sciences
Department of Plant and Soil Sciences
147 Townsend Hall
Newark, DE 19717-1303

Jean Stokes
College of Urban Affairs
184 Graham Hall
Newark, DE 19716

Patricia Waddington
Career Planning & Placement
Raub Hall
Newark, DE 19716

University of Denver

John Haag, Director of Internship
Career Center
2050 E. Evans Avenue
Denver, CO 80208

Suzanne Snider
Environmental Policy and Management
2327 East Evans Avenue
Denver, CO 80208

Ms. Cathy Grieve
School of Communications
2490 South Gaylord Street
Denver, CO 80208

University of the District of Columbia

Dr. Tilden J. LeMelle, President
4200 Connecticut Avenue, N.W.
Washington, DC 20008

Mr. Melvin Hall, Director
Job Location & Development
Student Placement Services
4200 Connecticut Avenue, N.W.
Washington, D.C. 20008

University of Dubuque

Mary A. Agria, Director
Career Resource Center
2000 University Avenue
Dubuque, IA 52001

University of Findlay

Michael Momany
Career Service Center
1000 N. Main Street
Findlay, OH 45840

University of Georgia

Kathryn Hatcher
Institute of Ecology
Ecology Building
Athens, GA 30602-2202

University of Hawaii

Michael Maglaya
Career Placement Services
2422 Campus Road
Honolulu, HI 96822

Dr. Jacqueline Miller
Environmental Center
2550 Campus Road
Honolulu, HI 96822

University of Houston, Clear Lake

Peter Bowman
Administrative Services
2700 Bay Area Boulevard
Houston, TX 77058

University of Idaho

Alice Pope Barbut
Cooperative Education
Education Building 204
Moscow, ID 83844-3088

Diana Gibney, Job Developer
Cooperative Education Program
EDU 204
Moscow, ID 83844-3088

University of Illinois at Urbana Champaign

School of Life Sciences
Undergraduate Advising Office
289 Morrill Hall
505 South Goodwin Avenue
Urbana, IL 61801

Mr. Brad Berberet
H. Hughes Program
for Undergraduate Education in Life Sciences
429 Natural History Bldg.
1301 W. Green St.
Urbana, IL 61801

Ms. Nikki Lowery
H. Hughes Program
Webmaster & Internship Coordinator
429 Natural History Bldg.
1301 West Green St.
Urbana, IL 61801

Ms. Claudia Washburn
H. Hughes Program
for Undergraduate Education in Life Sciences
429 Natural History Bldg.
1301 W. Green St.
Urbana, IL 61801

University of Iowa

Ms. Jean Blair
Division of Sponsored Programs
100 Gilmore Hall
Iowa City, IA 52242

University of Kansas

Julie Cunningham
Career Services Center
4010 Learned Hall
Lawrence, KS 66045

Nicholas Godfrey
Environmental Studies Dept.
517 W 14th Street
Lawrence, KS 66046

University of Kentucky

Ms. Caroline Francis
University Career Center
201 Mathews Building
Lexington, KY 40506-0047

University of Maine

Professor C.S. Cronan
Grad. Prog. in Ecology & Environ. Science
5722 Deering Hall
Orono, ME 04469-5722

Robert Thomas
Office of Cooperative Education
5781 Wingate Hall
Orono, ME 04469-5781

University of Maryland

Dr. Wayne H. Bell, VP, External Relations
Center for Environmental & Estuarine Studies
P.O. Box 775
Cambridge, MD 21613

University of Maryland at Baltimore

Laura Mrozek, Administrator
Environmental Law Program, School of Law
500 West Baltimore Street
Baltimore, MD 21201-1786

University of Maryland, Baltimore County

Dr. Susan Schneider
Dept. of Biological Sciences
1000 Hilltop Circle
Baltimore, MD 21250

University of Maryland at College Park

Ms. Joyce Brown
Environmental Science and Policy
0207 Symons Hall
College Park, MD 20742

Susan Kirk
Career Center, Experiential Learning Progs.
Hornbake Library, Room 0119
College Park, MD 20742

Traci Martin, Assistant Director
Career Center
3121 Hornbake Library
College Park, MD 20742

Ms. Terri Reed
School of Public Affairs
Van Munching Hall
College Park, MD 20742

University of Maryland, Eastern Shore

Department of Natural Science
Princess Anne, MD 21853

Career Center
Backbone Road
Princess Anne, MD 21853

Dr. Steve Rebach
Department of Natural Sciences
G.W. Carver Science Bldg.
Princess Anne, MD 21853

University of Massachusetts, Amherst

Ms. Lynn Zlotnick
Career Center
Box 35310
Amherst, MA 01003-5310

Gloria DiFulvio
Coordinator, Placement
School of Public Health and Health Sciences
416 Arnold House
Amherst, MA 01003

University of Miami

Dr. C. Mindy Nelson, Coordinator
Environmental Science Program
122 Cox Science Bldg.
P.O. Box 249118
Coral Gables, FL 33124-0421

Mariela Calderin, Graduate Studies Office
Rosenstiel Sch of Marine & Atmospheric Sci
4600 Rickenbacker Causeway
Miami, FL 33149

University of Michigan

Charlene A. Fluder
Global Change Project
Rm 1572, Dana Building
Ann Arbor, MI 48109-1115

Yolanda Lizardi Marino
Institute of Public Policy Studies
440 Lorch Hall
Ann Arbor, MI 48109-1220

Debbie Solowczuk
Office of Academic Programs
430 E. University Drive (Rm. 1024 Dana)
Ann Arbor, MI 48109

University of Minnesota

Pam Nelson
Career Center, Public Health
P.O. Box 819, 420 Delaware St., SE
Minneapolis, MN 55455

Dean M. Underwood, Director
College of Agriculture, Career Svcs. Office
272 Coffey Hall
1420 Eckless Avenue
St. Paul, MN 55108

Lynne Schuman
HHH Institute of Public Affairs
301 19th Avenue, South
Minneapolis, MN 55455

John Gulliver
St. Anthony Falls Laboratory
Civil Engineering
Minneapolis, MN 55455

University of Missouri

Gayle Neumeyer
Energy Systems Department
W1013 Engineering Building
Columbia, MO 65211

Dana Brown
Career Development & Placement
2-64 Agricultural Building
Columbia, MO 65211

Dave Britton
Career Opportunity Center
302 Norwood Hall
1870 Miner Circle
Rolla, MO 65409-0240

University of Montana

Vickie Watson
Environmental Studies
Missoula, MT 59812

University of Nebraska, Lincoln

Marcia Phelps
Student Employment & Internship Center
345 Nebraska Union
Lincoln, NE 68588-0495

University of Nevada

James Seiber
Center for Env. Sciences & Engineering
MS-200
Reno, NV 89557

University of Nevada, Las Vegas

Vicki Tripoli, Program Liaison Officer
Greenspun College of Urban Affairs
Dept. of Environmental Studies
4505 Maryland Parkway, Box 454030
Las Vegas, NV 89154-4030

University of New England

Judy Bellante, Coordinator
Career Services
Hills Beach Road
Biddeford, ME 04005

University of New Hampshire

Laurel Trufant, Education Coordinator
Dept. of Natural Resources
Rm. 215, James Hall
Durham, NH 03824

Katie Gelardi
Career Services Field Exper./Job Develop.
Hood House
89 Main Street
Durham, NH 03824-3577

Paul Rollison, Internship Office
Career Services
Hood House
89 Main Street
Durham, NH 03824

University of New Mexico

Michael E. Campana
Department of Earth & Planetary Sciences
Northrop Hall
Albuquerque, NM 87131-1116

University of North Carolina, Chapel Hill

Douglas Crawford-Brown
Dept. of Environmental Sciences/Engineering
CB #7400 Rosenau Hall
Chapel Hill, NC 27599

University of North Carolina, Chapel Hill

Caroline Okum
Curriculum In Public Policy
214 Abernathy Hall, CB 3435
Chapel Hill, NC 27599

University of North Dakota

Office of Research and Program Development
Box 7134
Grand Forks, ND 58202-7134

University of North Texas

Dr. Rollie Shafer
Associate VP & Dean of Graduate Studies
P.O. Box 5446
Denton, TX 76205-0446

University of Notre Dame

Lloyd H. Ketchum, Jr.
Department of Civil Engineering
156 Fitzpatrick Hall
Notre Dame, IN 46556-0767

University of Oklahoma

Dr. Ronald Coleman
Environmental Health Department
Box 26901, Room 413
Oklahoma City, OK 71190

University of Oregon

Mr. John Baldwin, Director
Institute for Sustainable Environment
132 Hendricks Hall
Eugene, OR 97403

Internship Director
Dept. of Planning, Public Policy & Management
1209 University of Oregon
Eugene, OR 97403

University of Pennsylvania

Jan McFarian
Morris Arboretum
9414 Meadowbrook Avenue
Philadelphia, PA 19118

University of Pennsylvania

Debbie Becker
Career Planning & Placement Service
3718 Locust Walk (McNeil Bldg., Suite 20)
Philadelphia, PA 19104-6209

Environmental Studies Division
Hayden Hall, Rm 251
240 S. 33 Street,
Philadelphia, PA 19104-6316

Greg Rost
Fells Center of Government
39th and Walnut Streets
Philadelphia, PA 19104

David Grossman
Internship Area, CPPS
3718 Locust Walk (Suite 20, McNeil Bldg.)
Philadelphia, PA 19104-6209

Roger Raufer
Environmental Studies
G-19 Meyerson Hall, 210 S. 34th Street
Philadelphia, PA 19104-6311

Alberto Chang
Society of Systems Engineers
109 Towne Building, 220 S. 33rd Street
Philadelphia, PA 19104

University of Pittsburgh

Ronald Neufeld
Department of Civil Engineering
Pittsburgh, PA 15261

Ms. Virginia Franke Kleist, Director
MOIS Program, Grad. School of Business
166A Mervis Hall
Pittsburgh, PA 15260

Nancy McIntyre, Student Affairs Administrator
Graduate School of Public Health
260 Kappa Drive
Pittsburgh, PA 15238

University of Puerto Rico

Dr. Rafael Munoz Candelario
Environmental Sciences
P.O. Box 22213, UPR Station
Rio Piedras, PR 00926

University of Puerto Rico

Dr. Francisco Folch
Department of Environmental Health
Box 5067
San Juan, PR 00936

University of Puerto Rico, Mayaguez Campus

Dean, College of Arts & Sciences
College Station
Mayaguez, PR 00681

Dean, College of Engineering
College Station
Mayaguez, PR 00681

Dean for Engineering Academic Affairs
College Station
Mayaguez, PR 00681

Dean for Academic Affairs
College Station
Mayaguez, PR 00681

Dean of Students
College Station
Mayaguez, PR 00681

Director, Office of Financial Aid
Office of the Dean of Students
College Station
Mayaguez, PR 00681

University of Rhode Island

Bobbi Koppel
Career Services
228 Roosevelt Hall
Kingston, RI 02881

University of Richmond

Andrew Ferguson, Director
Career Development Center
Richmond Hall
Richmond, VA 23173

University of South Alabama

Mr. James Wolfe, Assoc. VP of Research &
Dean of Graduate School
AD 300
Mobile, AL 36688-0002

University of South Carolina

C. Marjorie Aelion
Dept. of Environmental Health Sciences
School of Public Health
Columbia, SC 29208

University of South Florida

Renu Khator
Graduate Program in Anthropology
SOC 107
Tampa, FL 33620

Dr. Alvin Wolfe
Graduate Program in Anthropology
SOC 107
Tampa, FL 33620

University of Southern California

Steve Chaney-Rice
Career Center
University Village-STU 111
Los Angeles, CA 90089-4897

University of St. Thomas

Patricia McKinley
Career Service Center
3800 Montrose Boulevard
Houston, TX 77006

University of Tampa

Mamie Tapp
Career Information Center
401 W. Kennedy Boulevard
Tampa, FL 33606-1490

University of Texas, Arlington

Dr. Gerald Nehman
Env. Institute for Technology Transfer
Box 19050
Arlington, TX 76019

University of Texas, Austin

Courtney Brown
LBJ School of Public Affairs
OSAP, LBJ School, PO Drawer "Y"
Austin TX 78713

University of Texas-Pan American

Dr. Ruben Mazariegos
Department of Physics and Geology
1201 West University Drive
Edinburg, TX 78539-2999

University of Vermont

Nancy J. Hayden
Dept. of Civil & Environmental Engineering
Burlington, VT 05464

Sherrill Pattee
Office of Sponsored Programs
340 Waterman Bldg.
Burlington, VT 05464-0160

Jeff Collins
Field Naturalist Program
Marsh Life Sciences Building
Burlington, VT 05464

Ann Arcovitch
Center for Career Development
E Building
Burlington, VT 05464

Dr. Alan MacIntosh
School of Natural Resources
Aiken Center
Burlington, VT 05405

University of Virginia

Nancy Paulson
Career Center
Campbell Hall
Charlottesville, VA 22903

Ellie Tucker
Office of Career Planning & Placement
Garrett Hall, Lower Level
McCormick Road
Charlottesville, VA 22903

Bruce Dotson
Dept. of Urban and Environmental Planning
Campbell Hall
Charlottesville, VA 22903

University of Washington

Tara Koch
Graduate School of Public Affairs
208 Parrington Hall, DC-13
Seattle, WA 98195

Steve Trudell
Ecosystem Science Division
College of Forest Resources
Box 352100
Seattle, WA 98195-2100

University of West Florida

Dr. Jack Salmon
Political Science Department
11000 University Parkway
Pensacola, FL 32514

University of Wisconsin, Eau Claire

Bob Nelson
Environmental Health Program
Division of Allied Health
Eau Claire, WI 54702

University of Wisconsin, Madison

Barbara Borns
Institute for Environmental Studies
Rm 70 Science Hall
550 N. Park Street
Madison, WI 53706

Mona Hinamanu
Career Advising and Planning Services
905 University Avenue, Room 160
Madison, WI 53715-1008

University of Wisconsin, Stevens Point

San Szczytko
College of Natural Resources
CNR Building
Stevens Point, WI 54481

University of Wyoming

Barbara Kissack
Wyoming EPSCoR
P.O. Box 3622
Laramie, WY 82071-3622

Utah State University

Donna Crow
Career Placement & Cooperative Education
Logan, Utah 84322-4305

Vanderbilt University

Nancy Selah, Career Resource Specialist
Career Center
110 Alumni Hall
Nashville, TN 37240

Villanova University

Nancy Dudak
Office of Career Planning & Placement
Villanova, PA 19085

College of Liberal Arts and Sciences
Villanova, PA 19085

Virginia Commonwealth University

Tom Halasz
Career Center
P.O. Box 842007
907 Floyd Avenue
Richmond, VA 23284-2007

Virginia Polytechnic Institute

Ms. Claire Childress, Career Coordinator
College of Agriculture & Life Sciences
1060 Litton Reaves Hall
Blacksburg, VA 24061-0334

Conrad Heatwole
Agricultural Engineering Department
110 Alumni Hall
Blacksburg, VA 24061-0303

Virginia State University

Robert L. Turner, Jr., Director
Career Services
P.O. Box 9410
Petersburg, VA 23806

Lorenzo Lyons, Dean
School of Agriculture, Science & Technology
P.O. Box 9001
Petersburg, VA 23806

Virginia Union University

Dr. S. Dallas Simmons, President
1500 North Lombardy Street
Richmond, VA 23220

Mr. Joseph Lowe, III, Director
Career Planning & Placement
1500 N. Lombardy Street
Richmond, VA 23220

Wake Forest University

Dr. Robert Browne
Biology Department
P.O. Box 7325
Winston-Salem, NC 27109

Dr. Herman Eure, Chairman
Biology Department
P.O. Box 7325
Winston-Salem, NC 27109

Washington and Lee University

Amy Blackburn, Career Coordinator
Career Development & Placement
Lexington, VA 24450

Washington State University

Debbie Edwards
Career Services, 180 Lighty Building
P.O. Box 641061
Pullman, WA 99164-1061

Washington University of St. Louis

Ms. Kristen Shults
The Career Center
Campus Box 1091
One Brookings Drive
St. Louis, MO 63130-4899

Weber State University

Mr. James Godfrey, Manager
Cooperative Education & Internships
Career Services
Ogden, Utah 84408-2112

Wellesley College

Kathleen Lis, Internship Coordinator
Center for Work & Service
106 Central Street
Wellesley, MA 02181-8200

Wesley College

Terry Higgins, Program Director
Environmental Sciences
120 North State Street
Dover, DE 19901

West Chester University

Dr. Joan Welch
Department of Geography and Planning
West Chester, PA 19383

Mr. Chuck Shorten
Department of Health
West Chester, PA 19383

Linda Dijulia
Career Development Center
Lawrence 106
West Chester, PA 19383-4110

West Virginia State University

Dr. Hazo W. Carter, Jr., President
P.O. Box 399
Institute, WV 25112

Ms. Patricia Kline, Director
Career Services Office
Campus Box 185
P.O. Box 1000
Institute, WV 25112-1000

Western State College of Colorado

Layne Nelson, Director
Career Services
College Union
Gunnison, CO 81231

Wharton School

Ms. Janet R. Pack
Policy & Management Department
3620 Locust Walk, Suite 3105, SH-DH/6
Philadelphia, PA 19104

Wheaton College

Mr. Dale Fenton
Career Development Center
Wheaton, IL 60187

Whittier College

Ms. Carolyn Sharpen, Internship Coordinator
P.O. Box 634
Whittier, CA 90608

Widener University

Mary Pennington, Director
Career Advancement & Planning Services
1 University Place
Chester, PA 19013-5792

William and Mary, The College of

Ilsa M. Kaattari
Department of Biology
P.O. Box 8795
Williamsburg, VA 23187-8795

Williams College

Ms. Pamela A. Warren, Program Coordinator
Office of Career Counseling
Stetson Hall
Williamstown, MA 01267

Worcester Polytechnic Institute

Dr. Susan Vernon-Gerstenfeld
Interdisciplinary Studies Division
100 Institute Road
Worcester, MA 01609-2280

Xavier University

LaMoyne Williams
Center for Environmental Programs
7325 Palmetto Street
New Orleans, LA 70125

Yale University

Stanton C. Otis, Jr.
Dept. of Forestry & Environmental Studies
205 Prospect Street
New Haven, CT 06511-2189

Christy Bergheim, Career Counselor
School of Public Health
P.O. Box 208034
60 College Street
New Haven, CT 06520-8034

FY 2000 ENVIRONMENTAL PROJECTS

The following pages contain the NNEMS fellowships available at EPA. The fellowships are listed under these five categories:

- **Environmental Policy, Regulation, & Law**
  Topics in this category concern the review and evaluation of existing policies and regulations, as well as the development of new policies. Compliance with policies and regulations is also included.

- **Environmental Management & Administration**
  Topics in this category focus on implementing and improving management goals. Also included is the development and implementation of cooperative environmental management strategies.

- **Environmental Science**
  Topics in this category focus on field studies and laboratory research. The review of environmental policy and regulation requiring technical expertise is included in the Environmental Policy, Regulation, and Law category.

- **Public Relations and Communications**
  Topics in this category include the review and analysis of public response to EPA policies and regulations, as well as general public opinion of environmental issues. Also included in this category is the development of communication tools ranging from pamphlets and training materials to slide and film presentations in order to inform and educate the public on environmental protection issues.

- **Computer Programming and Development**
  Topics in this category include the development of computer software that can include, for example, the adaptation to PC or Macintosh formats and upgrading existing software packages.

Disclaimer Statement

All research projects listed in this catalog will be funded subject to the availability of funds.

Environmental Policy, Regulation, and Law

Topics in this category concern the review and evaluation of existing policies and regulations, as well as the development of new policies. Compliance with policies and regulations is also included.

Project Number and Category: 2000-1001 Environmental Policy, Regulation, and Law

Sponsoring Office: Office of Wetlands Strategies and State Programs Branch Wetlands Division

Office Mission/Responsibility: Support efforts to improve/enhance wetlands protection, management and/or restoration

Project Description: The Wetlands Strategies and State Programs Branch is offering a fellowship opportunity to work on various aspects of the wetlands program including wetlands policy development, science support, outreach and strategy development in a diverse range of areas including integrating wetlands protection into other program areas (watershed management nonpoint source and stormwater control, and water quality standards), and working with other levels of government (state/tribal/ local) to build partnerships to better protect and restore wetland resources. This fellowship will provide excellent exposure to a broad range of environmental, policy, and resource planning and management issues surrounding wetlands protection. The actual project will depend on student's interests.

Project Goals: Improving/enhancing tools, programs and/or policies for wetlands protection, management and restoration.

Desired Level of Education: 1st year graduate student or above

Project Location: EPA Headquarters, Washington, DC

Preferred Project Period: Summer 2000. Start date depends on student's schedule (fellowship can be 3 months - 12 months)

Sponsor Information: Lori Williams
Phone: 202 260 5084
Fax: 202 260 8000
E-mail: williams.lorraine@epa.gov

Project Number and Category: 2000-1002 Environmental Policy, Regulation, and Law

Sponsoring Office: Office of Pollution Prevention and Toxics, Pollution Prevention Division

Office Mission/Responsibility: To integrate a multimedia pollution prevention ethic both within and outside the EPA through support of pollution prevention efforts at the federal, state, and local level, and to promote prevention of pollution over EPA's traditional pollution control and cleanup actions, essentially to eliminate or reduce the creation of pollution in the first place.

Project Description: Environmentally Preferable Procurement: As directed by President Clinton in Executive Order 13101, Section 503, the Greening the Government Through Waste Prevention, Recycling, and Federal Acquisition, the US EPA issued proposed Guidance on the Acquisition of Environmentally Preferable Products and Services to help federal agencies take environmental attributes into consideration when making purchasing decisions. The NNEMS fellow will assist in identifying existing programs and opportunities to expand environmentally preferable purchasing at the federal, state, and local level in order to advance Executive Order 13101.

Pollution Prevention Incentives for States: Under the authority of the Pollution Prevention Act of 1990, the US EPA awards multimedia pollution prevention grants to states annually. The PPIS grant program was originally established to foster states acting as a primary leader in encouraging industry, small and medium sized business, local governments, and the public in order to shift priorities from pollution control to pollution prevention. The NNEMS fellow will research different state pollution prevention activities and compile resource information to assist the states in developing and managing their pollution prevention programs as a result of the pollution prevention state grants awarded by EPA.

Project Goals: Environmentally Preferable Procurement: The NNEMS fellow will participate in managing the production of the quarterly EPP update publication, responding to federal agencies seeking information on environmentally preferable procurements.

Pollution Prevention Incentives for States: The NNEMS fellow will assist the program office in evaluating and monitoring the pollution prevention grant program. The NNEMS fellow will learn how federal environmental protection programs interact with state partners to implement program objectives.

Desired Level of Education: 1st year graduate student

Project Location: EPA Headquarters, Washington, DC

Preferred Project Period: 12 months beginning June 2000

(continued on next page)

Sponsor Information:

Lena Ferris
Phone: 202 260 2237
Fax: 202 260 0178
E-mail: ferris.lena@epa.gov

Project Number and Category: 2000-1003 Environmental Policy, Regulation, and Law

Sponsoring Office: Office of Pollution Prevention and Toxics, Pollution Prevention Division

Office Mission/Responsibility: To integrate a multimedia pollution prevention ethic both within and outside the EPA through support of pollution prevention efforts at the federal, state, and local level, and to promote prevention of pollution over EPA's traditional pollution control and cleanup actions, essentially to eliminate or reduce the creation of pollution in the first place.

Project Description: Consumer Labeling Initiative: EPA undertook the Consumer Labeling Initiative (CLI – published in the Federal Register – 61 FR 12011, March 22, 1996) to foster pollution prevention, empower consumer choice and improve consumer understanding of safe use, environmental and health information about household consumer product labels. The CLI is a multi-phased pilot project focusing on indoor insecticides, outdoor pesticides, and household surface cleaners (ie, floor, basin, tub, and tile). CLI's efforts are aimed at achieving this goal by conducting research and gathering information so that EPA and our project partners may learn how to provide consumers with clear information on product labels.

Environmental Labeling Policy Coordination: There are a number of environmental labeling policy-related program activities ongoing at EPA. These include EPA participation in the development of international voluntary standards, and analysis and research on environmental labeling policy strategies.

Project Goals: The NNEMS fellow will perform the following activities:
- Analyze environmental labeling policies via a literature review
- Learn to design environmental "messages" for consumers
- Acquire skills to develop strategies for building consensus among stakeholders

Desired Level of Education: 1st year graduate student

Project Location: EPA Headquarters, Washington, DC

Preferred Project Period: 12 months beginning June 2000

Sponsor Information:
Julie Winters
Phone: 202 260 4000
Fax: 202 260 0178
E-mail: winters.julie@epa.gov

Project Number and Category: 2000-1004 Environmental Policy, Regulation, and Law

Sponsor Office: Office of Policy and Reinvention, Office of Policy Development

Office Mission/Responsibility: Develop new policies and approaches and provide high quality analysis that will enable EPA to better address emerging environmental challenges.

Project Description: The selected student(s) will conduct literature reviews, interviews and analyses of existing or proposed innovative approaches to environmental management and stewardship. Areas of current research interest include: environmental management systems, incentive based approaches including economic incentives, efforts to promote technology innovation, leadership and partnership programs, sector, community and livability initiatives.

The student's efforts will be expected to consider a broad range of criteria affecting the potential or actual success of the approach selected for study. These factors include external stakeholder views, environmental effectiveness, public accountability, feasibility, and cost. Each project will be conducted under the guidance of a senior program analyst. Specific approaches to be studied will be negotiated by the student and project sponsor. No surveys will be conducted as part of these efforts. The sponsor's primary interest is in projects that will be performed full or part time over the course of a full year, although summer only efforts will be considered.

Project Goals: To complete a substantive/analytic report that provides either an assessment/evaluation of or realistic options for an innovative approach to environmental management that is being considered/tried by the states, private sector, a partnership program or internationally. In the past, similar projects have served as the basis for a master's paper/ thesis for students who chose to take a year off in the middle of a two-year Master's program or to participate part time during the second year of a local Master's program.

Desired Level of Education: 1st year graduate student or above

Project Location: EPA Headquarters, Washington, DC

Preferred Project Period: 12 months beginning June 2000 (Flexible)

Sponsor Information:
Barry R. Korb
Phone: 202 260 2689
Fax: 202 401 9710
E-mail: korb.barry@epa.gov

Note: More than one student may be selected for this project.

Project Number and Category: 2000-1005 Environmental Policy, Regulation, and Law

Sponsoring Office: Office of the Deputy Regional Administrator, Office of Children's Health Protection

Office Mission/Responsibility: To develop programs and policies that protect children from environmental health threats.

Project Description: Sound public policy decisions are built from strong data and data analysis. As the agency seeks to develop policies and programs that protect children from environmental health threats, information about where children live and the potential risks they face is critical. Pound for pound, children drink more fluids and eat more food than adults do. Children also are potentially exposed to an array of chemical and toxic substances because of their play habits and other lifestyle activities. Understanding children's environments allow policymakers to address the pressing need for protecting them from environmental health risks.

Phase 1: Working with staff from the Geographic Information Systems, develop baseline maps of children living within a particular distance from each of New England's Superfund sites. Also, using data from state DPH offices, coordinate with other state/federal health agencies to map children living in public housing, and map areas with high prevalence of children identified with asthma and/or lead poisoning. The student will develop strong research and data presentation skills important for presenting information to others.

Phase 2: Participate in the development of a working conference bringing together HUD, HHS, EPA, state environmental and health commissioners to work on forwarding an agenda that addresses issues of children's health. The student will gain experience in working with agencies whose areas of responsibility rarely intersect and to learn the art of decision-making using a consensus building model.

Project Goals: Develop baseline information on the health of New England's children living at or near the poverty level.

Desired Level of Education: Junior or senior

Project Location: EPA Region 1, Boston, MA

Preferred Project Period: 8 weeks beginning Summer 2000

Sponsor Information:
Alice Kaufman
Phone: 617 918 1064
Fax: 617 918 1029
E-mail: kaufman.alice@epamail.epa.gov

Project Number and Category: 2000-1006 Environmental Policy, Regulation, and Law

Sponsoring Office: Division of Environmental Planning and Protection, Water Programs Branch, Wetlands Protection Section

Office Mission/Responsibility: The Region's Wetlands Program is involved in wetland protection efforts in New York, New Jersey, Puerto Rico, and the US Virgin Islands, including both regulatory and non-regulatory approaches.

Project Description: Assess the effectiveness of several locally based wetlands/watershed protection projects currently underway in New York State. These projects, undertaken by local and county governments, watershed associations, and land conservancy organizations, generally include components such as resource mapping, public outreach and education, identification of restoration opportunities, developing criteria for prioritizing acquisition areas, and the development or implementation of a watershed protection plan. The student would examine and analyze the various approaches and techniques used in these efforts.

Project Goals: The student will produce a report which:
- Summarizes, compares, and contrasts the various approaches used for these watershed efforts
- Makes recommendations for future organizations interested in similar projects
- Assesses the current status and availability of informational and technical tools for use by local entities in watershed and wetlands protection projects

Desired Level of Education: Undergraduate or graduate

Project Location: EPA Region 2, New York, NY

Preferred Project Period: June 2000 – September 2000

Sponsor Information: Daniel Montella
Phone: 212 637 3801
Fax: 212 637 3889
E-mail: montella.daniel@epamail.epa.gov

Project Number and Category: 2000-1007 Environmental Policy, Regulation, and Law

Sponsoring Office: Air Protection Division

Office Mission/Responsibility: Develop and implement programs that lead to the improvement in the air quality so that the health based air quality standards are met in Region III.

Project Description: This is a broad project addressing the integration of environmental, social, political, and economic impact assessment through the building of the Decision Consequence Model (DCM). The project possibilities are many and depends on the interest and capabilities of the applicant. All projects require learning and understanding how environmental programs affect facility and vehicle emissions and designing the Microsoft Access forms to analyze the effect of program changes and how these affect the ecosystem and the human community. The application of decision theory will be an important part of any project related to the building of the DCM. Knowledge of analytic hierarchy process (AHP) and analytic network process (ANP) are helpful. Knowledge of MSAccess and other computer languages is not required but is helpful. The student that successfully completes one of these projects will learn creative thinking and problem solving, hands-on knowledge of environmental programs, and technical knowledge of how impact assessments are conducted

.

Project Goals: Provide the critical technical link between emissions and environmental indictors such as the new ozone health standard that was promulgated in July 1997. Part of EPA's developing strategy in addressing the new ozone standard requires the formation of technical centers using regional and state personnel to relate the effect of emission reductions to the effect on the new ozone standard. The successful completion of this project would provide a necessary tool for the building of these technical centers. These technical centers would facilitate state relationships, and result in the submittal of more technically grounded air quality plans to EPA, by providing needed technical expertise and a forum to resolve technical issues that arise.

Desired Level of Education: Undergraduate and above

Project Location: EPA Region 3, Philadelphia, PA

Preferred Project Period: June 2000 – June 2001

Sponsor Information: Alan Cimorelli/Cynthia Stahl
Phone: 215 814 2189/ 215 814 2180
Fax: 215 814 2124
E-mail: cimorelli.alan@epa.gov

Project Number and Category: 2000-1008 Environmental Policy, Regulation, and Law

Sponsoring Office: Office of Policy and Management, Strategic Planning and Management Branch

Office Mission/Responsibility: Responsible for managing Region III's Strategic Planning Process. This includes policy development and program implementation.

Project Description: This project will ask a student to evaluate the impact of the Government Performance and Results Act (GPRA) on environmental programs at a Regional Office level. The student will do that by assessing one or two of the five Region III environmental priorities which were identified in response to GPRA and which have significant environmental impact in this region. The five priorities are: Climate Change, Region III Estuaries, Cities, Acidification, and Ozone. These priorities are being implemented within the framework of the Agency's Strategic Plan through the work of multi-media teams of senior staff and experts. Because of their multi-media applicability, it is suggested that the student would assess the Climate Change and/or Cities Priorities and evaluate the impact this innovative approach to the planning process has had on environmental problem solving in a Regional Office. The result would be a report, which would indicate the degree to which this bottoms-up approach to strategic planning and environmental problem solving has made a difference to the subject matter.

Project Goals: This project would afford a student the opportunity to evaluate an innovative approach to solving environmental problems at a regional level. It will afford the student the opportunity to meet with people at all levels of the organization and to gain their unique perspectives about this new approach.

Desired Level of Education: 1st year graduate student

Project Location: EPA Region 3, Philadelphia, PA

Preferred Project Period: June 2000 – August 2000

Sponsor Information: Mary A. Sarno
Phone: 215 814 5380
Fax: 215 814 5261
E-mail: sarno.mary@epamail.epa.gov

Project Number and Category: 2000-1009 Environmental Policy, Regulation, and Law

Sponsoring Office: Office of Enforcement, Compliance, and Environmental Justice

Office Mission/Responsibility: Coordinating the use of enforcement and compliance assistance among EPA Regional programs and the states, enforcing against violators of more than one law, and promoting equal public health and environmental protection for all in the Mid-Atlantic area.

Project Description: There is a need to assess the role that the community plays in environmental justice (EJ) issues. There is a communication and information gap that is hindering the community from taking a more active role in EJ issues. This project through research will evaluate the lack of environmental justice resources in a community. It will also assess the role that the community plays in EJ issues. If communities are empowered with environmental justice resources, they will enhance their effectiveness.

Project Goals:

1. To identify environmental justice organizations and community groups within the Region.
2. To research and assess the community groups' knowledge and awareness of environmental justice issues.
3. To compile the information and write a summary of the findings. The report would also make recommendations for creating a better flow of communication between the agency and the community groups. The final product should be in the form of a paper or presentation that will illustrate the findings.

Desired Level of Education: Senior

Project Location: EPA Region 3, Philadelphia, PA

Preferred Project Period: June 2000 – August 2000

Sponsor Information:

Reginald Harris
Phone: 215 814 2988
Fax: 215 814-2905
E-mail: harris.reginald@epa.gov

Project Number and Category: 2000-1010 Environmental Policy, Regulation and Law

Sponsoring Office: Office of Enforcement, Compliance, and Environmental Justice

Office Mission/Responsibility: Coordinating the use of enforcement and compliance assistance among EPA Regional programs and the states, enforcing against violators of more than one law, and promoting equal public health and environmental protection for all in the Mid-Atlantic area.

Project Description: There is a need to address environmental justice issues across various media in order to gain an understanding of current topics in environmental justice. The student would be responsible for keeping current with national EJ policy and inform the Region 3 divisions about the latest news in EJ. The student would be a liaison between the Regional Coordinator and various divisions such as Air, Water, and Solid Waste. The student would also create a weekly newsletter with weekly updates to inform the divisions of national and intra-agency environmental justice news.

Projects Goals: The project will provide the student with an opportunity to meet many of the people involved with environmental justice issues in Region 3. It will engage the student in intra-agency policy issues dealing with environmental justice and set up a foundation for continued communication.

Desired Level of Education: Senior

Project Location: EPA Region 3, Philadelphia, PA

Preferred Project Period: June 2000 – Fall 2000

Sponsor Information:
Reginald Harris
Phone: 215 814 2988
Fax: 215 814 2905
E-mail: harris.reginald@epa.gov

Project Number and Category: 2000-1011 Environmental Policy, Regulation, and Law

Sponsoring Office: Innovative Strategies & Economics Group, Air Quality Strategies & Standards Division, Office of Air Quality Planning & Standards, Office of Air & Radiation

Office Mission/Responsibility: The Innovative Strategies & Economics Group provides the regulatory analytical support for National Stationary Source Emission Regulation and the National Ambient Air Quality Standard programs. The scope of regulatory analytical support includes control strategy design and costing, economic impact, and benefit analysis as well as innovative strategies such as trading and fee programs.

Project Description: The incumbent(s) applies their knowledge of economic theory and principles within structure of salient Congressional Mandates, Executive Orders, and Judicial Rulings. Within this structure, the incumbent verifies and validates analytical procedures and findings, performs sensitivity analyses, and develops graphical presentations of data and results. The potential scope of the project(s) includes benefit analysis, control strategy design and costing, economic impact assessment, and innovative strategies (including voluntary measures, trading, and fee programs), and benefit-cost analysis.

Completion of the project includes attendance at associated intra-agency meetings, development of technical reports and data files, and presentations to senior analysts and managers.

Project Goals: The incumbent will better understand the effect of legislative, executive, and judicial branch considerations on the structure and conduct of applied environmental economics. In addition, the incumbent will gain more insight regarding evaluation and application of analytical methods and data as well as a multi-discipline approach to regulatory and policy analysis.

The project will help improve the quality assurance, robustness, and communication aspects of selected regulatory and policy analyses. With such improvements, the credibility and understanding of economic analysis in environmental regulations and policy will be enhanced.

Desired Level of Education: Junior or 1st year graduate student. If the selectee is an undergraduate, the student should have completed courses through the junior year. If the selectee is a graduate student, the student should have completed courses through the first year of graduate school.

Project Location: OAQPS-Research Triangle Park, NC

Preferred Project Period: June 2000 – September 2000

Sponsor Information:

Ron Evans
Phone: 919 541 5488
Fax: 919 541 0839
E-mail: evans.ron@epa.gov

Note: More than one student may be selected for this project.

Environmental Management and Administration

Topics in this category focus on implementing and improving management goals. Also included is the development and implementation of cooperative environmental management strategies.

Project Number and Category: 2000-2001 Environmental Management and Administration

Sponsoring Office: Office of the Regional Administrator, Environmental Education

Project Description: Each year since 1992 the EPA-New England has awarded 20-30 environmental education grants. A requirement for every grant is to write a final report and include all work products developed during the project. The work products may be an educational video, an activity guide, teacher training materials, or an outdoor curriculum to name just a few. The work products are an incredible resource for others to use, however most work products stay within their case file.

This project would include reviewing and summarizing all environmental education grant work products, categorizing all like work products, ranking them for their educational content and value, documenting all the work products and their rank, and working with the EPA-New England Library to make them available.

Project Goals: Review all EPA-New England environmental education grant work products, summarize and categorize them, rank work products for educational value and content, and place them in EPA-New England Library.

Desired Level of Education: 1st year graduate student or above

Project Location: EPA Region 1, Boston, MA

Preferred Project Period: 8 weeks beginning Summer 2000

Sponsor Information:
Kristen Conroy
Phone: 617-918-1069
Fax: 617-918-1029
E-Mail: conroy.kristen@epa.gov

Project Number and Category: 2000-2002 Environmental Management and Administration — CANCELED

Sponsoring Office: Office of Environmental Stewardship, Assistance and Pollution Prevention Office, The Center for Environmental Industry and Technology (CEIT)

Office Mission/Responsibility: CEIT assists New England's environmental technology industry, especially small start-up firms, in reducing the barriers that innovative environmental technologies must overcome in order to achieve commercialization.

Project Description: CEIT produced the New England Energy and Technology Economic Assistance Guide in 1995. The Guide is a comprehensive publication of technical and financial assistance programs and opportunities that are available to assist New England's business community. Many of the agencies and programs listed in the Guide have changed and it needs to be updated. The student would have the existing Guide as a format; would contact all the programs and agencies listed to determine whether they are still offering the same or different services. The student would update the existing information to reflect the programs and agencies which should be included in the latest edition.

The student would produce a Word Perfect version of the guide and then the student would work with EPA-Region 1's desktop publishing and web site group to develop the finished product. The guide provides a service to New England's environmental technology industry. These businesses are frequently looking for information on the programs and assistance opportunities which are available.

Project Goals: Produce the Year 2000 New England Energy and Technology Economic Assistance Guide. The finished product would be a hardcopy guide as well as an electronic guide.

Desired Level of Education: 1st year graduate student

Project Location: EPA Region 1, Boston, MA

Preferred Project Period: 6-8 weeks beginning Summer 2000

Sponsor Information: Maggie Theroux
Phone: 617-918-1613
Fax: 617-918-1810
E-Mail: theroux.maggie@epa.gov

Project Number and Category: 2000-2003 Environmental Management and Administration

Sponsoring Office: Office of Federal Activities (OFA), International Enforcement and Compliance Division

Office Mission/Responsibility: The Office of Federal Activities (OFA) is responsible for coordinating the Office of Enforcement and Compliance Assurance (OECA) international activities for the trilateral North American Commission for Environmental Cooperation (CEC-which includes Canada and Mexico); the bilateral Mexico Border work; and in support of U.S. foreign policy commitments. OFA's international responsibilities are carried out under the National Environmental Policy Act (NEPA), EPA's environmental laws, legislation implementing the North American Free Trade Agreement (NAFTA), other international free trade agreements and treaties, and other international commitments.

Project Description: In support of the CEC responsibilities, OFA represents the U.S. environmental enforcement interests at meetings with enforcement representatives from Canada and Mexico; prepares an annual report on how the U.S. is meeting its treaty obligations under the NAFTA Environmental Side Agreement to effectively enforce U.S. environmental laws; and negotiates annual work plans. In support of the Mexico Border work responsibilities; OFA serves as the U.S. Co-chair of the Border XXI Enforcement Cooperation Work Group; develops annual work plans; and develops bilateral annual reports on program accomplishments. In support of U.S. foreign policy commitments, OFA manages the delivery of the international training module, "Principles of Environmental Compliance and Enforcement" and other self-supporting capacity building to meet U.S. commitments entered by the Administration. OFA anticipates managing course deliveries in Southeast Asia, the Middle East and North American Tribes and providing associated technical assistance. The student will assist in one or more of the above activities. (This NNEMS project will not require international travel.)

Project Goals: To afford the student the opportunity to work on issues related to EPA's involvement in international environmental enforcement and compliance assistance activities, and various capacity building/training programs; focusing on EPA's trilateral CEC obligations, bilateral Mexico Border work, and U.S. foreign policy commitments and treaties which protect the nation's environmental interests.

Desired Level of Education: Junior or above

Project Location: EPA Headquarters, Washington, DC

Preferred Project Period: June 2000 - August 2000

Sponsor Information: Beverly Updike
Phone: 202 564-7142
Fax: 202 564-0070
E-Mail: updike.beverly@epa.gov

Project Number and Category: 2000-2004 Environmental Management and Administration

Sponsoring Office: Office of Federal Activities (OFA), NEPA Compliance Division

Office Mission/Responsibility: The Office of Federal Activities (OFA) has the national program responsibilities for reviewing major Federal actions significantly affecting the environment, as required under 309 of the Clean Air Act and the National Environmental Policy Act (NEPA). OFA ensures that EPA programs and activities comply with environmental laws and regulations, including NEPA, the Endangered Species Act (ESA), the National Historic Preservation Act (NHPA), and the Executive Orders (EO) on Environmental Justice. OFA serves as the principle point of contact and liaison with other Federal agencies and provides consultation and technical assistance to those agencies relating to EPA's areas of expertise and responsibility. OFA also manages the official filing activity for all Federal environmental impact statements (EIS) in accordance with a memorandum of agreement with the Council of Environmental Quality for implementing the procedural provisions of NEPA.

Project Description: OFA reviews over 600 major Federal actions significantly affecting the environment and approximately 1500 environmental assessments of smaller Federal projects with potential environmental impacts to ensure incorporation of needed environmental improvements. The student will assist a lead analyst in conducting 309 process analysis and/or the review of specific environmental assessments (EA) or EISs of assigned Federal actions. Possible analytical efforts include evaluating the effectiveness of EPA's 309 review of EISs, working on surface transportation issues (i.e., Transportation Equity Act for the 21st Century), or the Antarctic Science, Tourism and Conservation Act issues. The participant may also be involved in the development of Agency orders and procedural guidelines for the review of Federal actions impacting the environment, such as the protection of floodplain, wetlands, agricultural or timberlands.

Project Goals: To familiarize the student with NEPA requirements as they relate to environmental protection, and to give the student an overall perspective on the role EPA plays in reviewing the significant environmental impacts of proposal Federal actions and informing the public of these actions.

Desired Level of Education: Junior or above

Project Location: EPA Headquarters, Washington, DC

Preferred Project Period: June 2000 - August 2000

Sponsor Information: Ken Mittelholtz
Phone: 202 564-7156
Fax: 202 564-0070
E-Mail: mittelholtz.ken@epa.gov

Project Number and Category: 2000-2005 Environmental Management and Administration

Sponsoring Office: Office of Federal Activities (OFA), Immediate Office

Office Mission/Responsibility: The OFA is responsible for coordinating the Office of Enforcement and Compliance Assurance (OECA) international enforcement and compliance activities and for national management of EPA's responsibilities under the National Environmental Policy Act (NEPA). OFA's international responsibilities are carried out under NEPA, EPA's environmental laws, legislation implementing the North American Free Trade Agreement (NAFTA), other international free trade agreements and treaties, and other international commitments.

OFA supports informal partnership arrangements to advance both international environmental compliance and enforcement, and environmental impact assessments consistent with U.S. program priorities and foreign policy objectives. In cooperation with the United Nations Environment Program (UNEP), OFA co-staffs with the Netherlands, the International Network for Environmental Compliance and Enforcement (INECE). INECE is an informal partnership of government officials, international and non-governmental organizations to promote effective environmental compliance with and enforcement of domestic environmental laws and international environmental agreements through networking, capacity building and cooperation.

Project Description: The student will assist in preparing publications on comparative country experiences, aggregating the results of country progress reports, conducting research and collecting available international support materials (such as inspection manuals) to promote, monitor and enforce provisions of environmental law. (This NNEMS project will not require international travel.)

Project Goals: To allow the student to acquire a working knowledge of international environmental policy and program implementation through environmental compliance, enforcement and environmental impact assessment; learning the players involved in implementing environmental law, and having an opportunity to work with senior officials within EPA as well as government officials and NGOs throughout the world including UNEP and the World Bank. The student will work on issues related to EPA's involvement in international environmental compliance and enforcement activities, and capacity building/training programs.

Desired Level of Education: Graduate student

Project Location: EPA Headquarters, Washington, DC

Preferred Project Period: June 2000 - August 2000

Sponsor Information:
Cheryl Wasserman
Phone: 202 564-7129
Fax: 202 564-0070
E-Mail: wasserman.cheryl@epa.gov

Project Number and Category: 2000-2006 Environmental Management and Administration

Sponsoring Office: Office of Reinvention

Office Mission/Responsibility: Oversight of the Regional Pollution Prevention Program

Project Description: The student will participate in implementing a Pollution Prevention (P2) Project, which will focus on reducing or eliminating pollution from a significant source(s) within the region. The project will include research on P2 opportunities for the identified source(s) and an analysis of the feasibility of implementation.

Project Goals: To submit a report on the research. The student will increase knowledge of pollution prevention.

Desired Level of Education: Freshman through 1st year graduate student

Project Location: EPA Region 3, Philadelphia, PA

Preferred Project Period: Summer 2000

Sponsor Information:
Jeffrey J. Burke
Phone: 215 814-2761
Fax: 215 814-2783
E-Mail: burke.jeffrey@epa.gov

Project Number and Category: 2000-2007 Environmental Management and Administration

Sponsoring Office: Waste Minimization Team, Technical Support Branch, Waste & Chemicals Management Division

Office Mission/Responsibility: By providing high quality technical support to the States and hazardous waste generators in Region III, promote waste minimization activities and contribute toward achieving the goals of the Waste Minimization National Plan (i.e., achieve a 50% reduction in hazardous persistent, bio-accumulative, and toxic (PBT) chemicals in the environment by 2005.)

Project Description: Reporting to an Environmental Scientist or Engineer team member, the candidate will participate in two important projects: (1) identify the sources of PBT-generated wastes in selected, high priority industries in Region III by using market research techniques (i.e., phone interviews and literature research) and gaining an understanding of specific industrial processes; (2) measure trends in PBT reductions within several industry segments by comparing information obtained from existing EPA data bases; produce graphics and geographic maps of resulting analyses.

Project Goals: (1) Identify sources of PBT chemicals within selected industrial segments to understand their environmental impacts and opportunities for reduction. (2) Provide graphical and tabular information on trends and the distribution of PBT generators by Region III States in order to educate the community and industry groups on the environmental impact of PBT chemicals.

Desired Level of Education: Junior

Project Location: EPA Region 3, Philadelphia, PA

Preferred Project Period: Summer 2000

Sponsor Information:
Wayne Naylor
Phone: 215 814-3385
Fax: 215 814-3113
E-Mail: naylor.wayne@epa.gov

Project Number and Category: 2000-2008 Environmental Management and Administration

Sponsoring Office: Office of Communications, Education and Media Relations, Office of Environmental Education (OEE)

Office Mission/Responsibility: This mission of the Office of Environmental Education is to support education efforts that develop an environmentally conscious and responsible public. As authorized under the National Environmental Education Act, OEE administers various programs such as grants, educator training, college fellowships, and youth awards. OEE also facilitates partnerships which support and advance the field of environmental education.

Project Description: The purpose of this project is to conduct research on specific aspects of environmental education. The student(s) will conduct research and prepare a paper documenting the results of research on one of the following topic areas:
(1) How effective is environmental education (EE) in meeting environmental protection goals? Can it be demonstrated that EE is a valid tool in meeting the nation's environmental protection goals (such as clean air, clean water, safe foods, etc.)? What anecdotal evidence and research studies support this cause and effect relationship?
OR
(2) To what extent does EE improve student academic performance when it is integrated within various core subjects (such as science, social studies, language arts, etc.)? What specific characteristics of an EE program and/or the instructional practices used have the greatest impact on student performance? What are the implications of this research for linking EE with state and national education reform efforts?

The graduate student(s) must work under the supervision of a faculty member who is knowledgeable about education and/or environmental education.

Project Goals: To conduct research on aspects of environmental education that furthers the field of environmental education.

Desired Level of Education: A graduate student is preferred.

Project Location: The graduate student's academic institution

Preferred Project Period: Up to 3 years (part time) beginning Summer 2000

Sponsor Information:
Ginger Keho/Kathleen MacKinnon
Phone: 202 260-4129/4951
Fax: 202 260-4095
E-Mail: keho.ginger@epa.gov
mackinnon.kathleen@epa.gov

Note: One or more students may be selected for this project.

Environmental Science

Topics in this category focus on field studies and laboratory research. The review of environmental policy and regulation requiring technical expertise is included in the Environmental Policy, Regulation, and Law category.

Project Number and Category: 2000-3001 Environmental Science

Sponsoring Office: Wetlands Division, Wetlands Strategies and State Programs Branch

Office Mission/Responsibility: Support efforts to improve/enhance wetlands protection, management and/or restoration.

Project Description: The Wetlands Division is offering a fellowship opportunity for three to twelve months with the Wetland Strategies and State Programs Branch (WSSPB). This project will focus on scientific and technical aspects of evaluating, protecting, and restoring wetlands. The student will have the opportunity to work with staff on a variety of projects, such as improving wetland restoration, helping states and tribes develop methods to evaluate the health of wetlands, and incorporating wetlands into traditional water quality and watershed management approaches. The student will also take the lead on one project, based on the student's interests. Applicants should have strong writing and communication skills. Some education or experience with wetlands or other aquatic habitats is desirable but not required. Similarly, some education or experience in ecology, water quality, ecosystem restoration, or watershed management is also desirable but not required.

Project Goals: Better integration of wetlands science into policy development and implementation.

Desired Level of Education: 1st year graduate student or above

Project Location: EPA Headquarters, Washington, DC

Preferred Project Period: Summer 2000. Start date dependent on student's schedule. Fellowship can be from 3 months up to 12 months.

Sponsor Information:
Tom Danielson
Phone: 202 260 5299
Fax: 202 260 8000
E-mail: danielson.tom@epa.gov

Project Number and Category: 2000-3002 Environmental Science

Sponsoring Office: Office of Solid Waste and Emergency Response/Technology Innovation Office (TIO)

Office Mission/Responsibility: The mission of the TIO is to encourage the use of new treatment and characterization technologies by government and industry to contaminated waste sites by removing regulatory/institutional impediments and providing richer technology and market information to federal agencies, states, consulting engineering firms, responsible parties, technology developers, and the investment community.

Project Description: For this project, the program participant will prepare a technology assessment report or comparative analysis on waste site assessment or cleanup technologies. Reports will include such information as a summary of theory and design, current status of use, summary of existing performance data, projected costs, advantages, and disadvantages of the technology or technologies. A comparative analysis could compare two or more technologies that apply to the same contaminant or site problem. The technologies of interest that could be studied include bioremediation of soil and ground water; phytoremediation of a specific contaminant or class of contaminants in soil or ground water; waste containment; remediation of sediments; technologies for site characterization including in situ detection and monitoring of dense nonaqueous phase liquids (DNAPLs); and techniques for optimizing operation and maintenance of facilities. Students may find the report, and associated research, useful to fulfillment of thesis requirements.

Project Goals: The goal of this project is to develop useful information on new assessment and cleanup technologies to remediation professionals who may be able to apply the technology to their contaminated site.

Desired Level of Education: Senior or 1st year graduate student

Project Location: EPA Headquarters, Arlington, VA

Preferred Project Period: June 2000 – September 2000

Sponsor Information:
Linda Fiedler
Phone: 703 603 7194
Fax: 703 603 9135
E-mail: fiedler.linda@epa.gov

Project Number and Category: 2000-3003 Environmental Science

Sponsoring Office: Office of Solid Waste, Permits and State Programs Division, Federal, State and Tribal Programs Branch

Office Mission/Responsibility: The focus of the Permits and State Programs Division is the effective implementation of the national hazardous waste program. This is accomplished by encouraging state/tribal partnerships and programs, developing regulations, guidance, and technical assistance related to permitting of hazardous waste facilities, and developing national program management policy and oversight guidance.

Project Description: Conduct a study regarding mixed waste generation in the U.S. (Mixed wastes which are hazardous based on definitions in the Resource Conservation and Recovery Act and are also radioactive based on definitions of source, special nuclear and by-product material in the Atomic Energy Act.) Using available data from generators of mixed waste, the study will include analysis of information on the generation of mixed wastes by selected industries and describe trends such as changes in types and volumes of wastes generated, and other relevant information.

Project Goals: Development of a report covering the findings of the study. The report might include a multi-year trend analysis for selected industries highlighting the types of mixed wastes generated, the volumes generated, and waste management practices used by the industries selected. The study may be used to inform community groups, universities, states, and other governmental entities of trends in mixed waste generation. The study will add to the body of knowledge available on mixed waste.

Desired Level of Education: Senior or 1st year graduate student

Project Location: EPA Headquarters, Crystal City, Arlington, VA

Preferred Project Period: June 2000 – September 2000 (negotiable)

Sponsor Information:
Nancy Hunt
Phone: 703 308 8762
Fax: 703 308 8638
E-mail: hunt.nancy@epa.gov

Project Number and Category: 2000-3004 Environmental Science

Sponsoring Office: Division of Environmental Science and Assessment, Monitoring and Assessment Branch

Office Mission/Responsibility: Conduct environmental investigations of surface water, groundwater and air quality in Region 2.

Project Description: Assist with the data analysis and interpretation phase of an investigation to examine relationships between land use and water quality in a southern NJ watershed. The student would be involved with statistical analysis of data, interpretation of results and report preparation. The types of data include biological measures, chemical data and land use information. The project would involve interaction with hydrologists, biologists, modelers and statisticians. The outcome would be to provide a scientifically defensible, complete final report.

Provide Goals: To provide a student experience with analyzing data, drawing conclusions and developing a final project report.

Desired Level of Education: 1st year graduate student

Project Location: EPA Region 2, Edison, NJ

Preferred Project Period: June 2000 - August 2000

Sponsor Information:
Randy Braun
Phone: 732 321 6692
Fax: 732 321 6616
E-mail: braun.randy@epa.gov

Project Number and Category: 2000-3005 Environmental Science

Sponsoring Office: Office of Analytical Services & Quality Assurance

Office Mission/Responsibility: To provide/assure appropriated quality of scientific information for decision making in Region 3.

Project Description: The student will participant in a continuing development of laboratory pollution prevention procedures including: (1) Expanding the scope of the solvents recycled and reused internally at the Environmental Science Center; and (2) developing and validating new analytical procedures for extracting target organic toxic compounds from environmental samples that require far less solvent than required by current protocols, e.g., pressurized fluid extraction; solid phase extraction and headspace GC/GC/MS analyses.

Project Goals: The student will learn to recycle solvents that are employed in environmental analyses and learn the operation of an automated spinning band still. The student will gain an understanding of and first-hand experience with the EPA's analytical protocols for the analysis of trace organics, e.g., GC chromatographic and organic extraction analyses.

Desired Level of Education: Undergraduate or graduate

Project Location: EPA Region 3, Fort Meade, MD

Preferred Project Period: Summer 2000

Sponsor Information:
Joe Slayton
Phone: 410 305 2653
Fax: 410 305 3095
E-mail: slayton.joe@epa.gov

Project Number and Category: 2000-3006 Environmental Science

Sponsoring Office: Office of Environmental Programs, Environmental Services Division

Office Mission/Responsibility: Oversight of wetland protection efforts in the Mid-Atlantic Region, including regulatory and non-regulatory approaches.

Project Description: To develop a wetlands protection plan that supports the president's Clean Water Action Plan to restore and preserve aquatic ecosystems, especially wetlands. Field work and scientific research will be part of the fellowship. Research on how to restore wetlands and new compensation techniques will be investigated by the student.

Project Goals: A report will need to be developed identifying ways to best achieve the restoration goals of the Clean Water Action Plan.

Desired Level of Education: Undergraduate or graduate

Project Location: EPA Region 3, Philadelphia, PA

Preferred Project Period: June 2000 – August 2000

Sponsor Information:

Ralph Spagnolo
Phone: 215 814 2718
Fax: 215 814 2782
E-mail: spagnolo.ralph@epa.gov

Project Number and Category: 2000-3007 Environmental Science

Sponsoring Office: Office of Ecological Assessment and Management, Marine and Coastal Team

Office Mission/Responsibility: Protection of coastal waters for Region 3.

Project Description: The student will work with the Marine and Estuaries Team in conducting coastal monitoring specifically collecting water quality and benthic data. The student will seive and sort samples and prepare a data report. Using the data and literature sources, the student will prepare a project report. Special emphasis will be made on using statistical and other tests to analyze data for the report.

Project Goals: The project goals will include preparing a data report, assisting in field and laboratory analyses, and assisting in reviewing data and other reports on coastal pollution.

Desired Level of Education: Senior or 1st year graduate student

Project Location: EPA Region 3, Philadelphia, PA

Preferred Project Period: May 2000 – August 2000

Sponsor Information:
William C. Muir
Phone: 215 814 2741
Fax: 215 814 2782
E-mail: muir.william@epa.gov

Project Number and Category: 2000-3008 Environmental Science

Sponsoring Office: Office of Compliance & Enforcement

Office Mission/Responsibility: Pittsburgh Area Storm Water Study

Project Description: Development of storm water quality and quantity in the Allegheny County region. Flow and quality information relative to rainfall intensity and duration is required to develop an understanding of surface waters within the watershed that are adversely impacted by Sanitary Sewer Overflows (SSO). Such information will be incorporated into a data set for the development of computerized GIS systems, and the identification of critical points for monitoring. Students from the University of Pittsburgh preferred.

Project Goals: Examination and analysis of reported data and information developed by Publicly Owned & Operated Treatment Plants (POTWs) on SSO occurrences within Allegheny County. Incorporate SSO quantitative data with associated temporal intensity and duration of rainfall. Examine such data on a statistically valid basis. Student Resources: One or two qualified graduate students working with both the Allegheny County Health Department and faculty at the University of Pittsburgh in conjunction with EPA Region III officials.

Desired Level of Education: 1st year graduate student

Project Location: University of Pittsburgh, Pittsburgh, PA

Preferred Project Period: June 2000 - August 2000

Sponsor Information:
Robert J. Sanchez
Phone: 215 814 3451
Fax: 215 814 2302
E-mail: sanchez.robert@epa.gov

Note: More than one student may be selected for this project.

Project Number and Category: 2000-3009 Environmental Science

Sponsoring Office: Office of Compliance & Enforcement

Office Mission/Responsibility: Storm Water Initiative

Project Description: Assist in development and implementation of the wet weather initiative to address polluted runoff from animal feed lots, municipalities and industrial sources. Conduct a comprehensive and critical review of wet weather impacts to waterways. Prepare an information packet suitable for municipal township officials, the local press, and the public to assist in the understanding of the impact of wet weather (40 CFR 122.26).

Project Goals: Gain knowledge of impacts of storm water from various industrial sources. Experience interaction with the regulated community including the public. Develop skills in enforcement activities such as inspections, negotiations, and case development.

Desired Level of Education: Junior

Project Location: EPA Region 3, Philadelphia, PA

Preferred Project Period: June 2000 - August 2000

Sponsor Information:
Robert J. Sanchez
Phone: 215 814 3451
Fax: 215 814 2302
E-mail: sanchez.robert@epa.gov

Project Number and Category: 2000-3010 Environmental Science

Sponsoring Office: Office of Environmental Programs

Office Mission/Responsibility: Environmental review and comment concerning the National Environmental Policy Act; Section 404 of the Clean Water Act and Section 10 of the 1899 Rivers and Harbors Act. Enforcement responsibilities re: Section 404. Environmental consultation with other agencies (watersheds, cumulative impact analysis, functional assessment, etc.)

Project Description: Validating the utility and accuracy of wetland field measurements in their use in wetland functional assessment models: The student will collect and analyze data relating to wetland structure and ecological dynamics (e.g. soils, hydrology, plant community, landscape ecology). Using draft functional models the student will report on how representative the models are in reflecting the ecological functions of the wetlands studied. In addition the student will make recommendations as to the use of such models and in improvements in field measurement techniques.

Project Goals: The student will gain experience in the application of field sampling methods (vegetation, soils, shallow groundwater) in wetlands. Combining field data with state of the art analytical tools the student will evaluate the strength of existing functional assessment models and make recommendations as to how they may be improved.

Desired Level of Education: Junior, senior or 1st year graduate student

Project Location: EPA Region 3, Philadelphia, PA

Preferred Project Period: June 2000 – August 2000

Sponsor Information:
Charles A. Rhodes Jr.
Phone: 215 814 2743
Fax: 215 814 2783
E-mail: rhodes.charles@epa.gov

Project Number and Category: 2000-3011 Environmental Science

Sponsoring Office: Environmental Services Division

Office Mission/Responsibility: Field office for Region III and regional freshwater biology laboratory/ leading aquatic biological monitoring effort for EPA in support of Environmental Impact Statement regarding mountaintop mining of coal in the Appalachian region.

Project Description: Work with freshwater biological samples and data from various sources including industry, government and volunteers. Enter, compile and evaluate environmental data into computerized systems including GIS platforms. Develop improved systems of storing, reporting and evaluating biological data. The contacts could include mountaintop coal mine companies, state and federal agencies, watershed groups, and environmental advocacy groups.

Project Goals: Increase the value of volunteer monitoring efforts involving biological data.

Desired Level of Education: Sophomore through senior

Project Location: EPA Region 3, Wheeling, WV

Preferred Project Period: June 2000 - August 2000

Sponsor Information: Gary Bryant
Phone: 304 234 0230
Fax: 304 234 0257
E-mail: bryant.gary@epa.gov

Project Number and Category: 2000-3012 Environment Science - CANCELED

Sponsoring Office: Management Division, Environmental Services Branch, Houston Laboratory

Office Mission/Responsibility: Mobile air monitoring with the Trace Atmospheric Gas Analyzer (TAGA). The TAGA is a self contained mobile laboratory capable of real-time sampling and analysis in the low parts per billion level of outdoor air or emissions from various environmental sources and concerns.

Project Description: The student will develop an understanding and use of air-modeling distributions of chemicals and gases as the analysis results provide. Source air contaminant studies will be conducted by the student at various possible hazardous wastes and air emission sites such as those found at Superfund sites. The student will gain the knowledge and experience of the use of advanced analytical instrumentation and data systems on real environmental systems and samples. The student will benefits from this project not only by using some of the latest laboratory scientific instrumentation available for the analysis of hazardous wastes and air toxics, but also by participating in the source determinations and the responsible chemicals for such contamination and by air-modeling studies. Such studies from this project will be very useful to a better understanding of environmental science of such contamination and sources.

Project Goals: The TAGA can be used in cleanup, removal and remediation efforts to track their progress and to monitor that emissions from waste disposal sites and operations are within acceptable limits. Investigations of uncontrolled releases from chemical spills, unknown or suspected sources of “bad” odors such as nearby chemical or refinery plant operations, indoor airborne contaminants (such as misapplied pesticides) are other examples of TAGA uses and versatility.

Desired Level of Education: Senior or 1st year graduate student or above

Project Location: EPA Region 6, Houston, TX

Preferred Project Period: June 2000 – September 2000

Sponsor Information:
Douglas Lipka
Phone: 281 983 2100
fax: 281 983 2124
E-mail: lipka.douglas@epa.gov

Project Number and Category: 2000-3013 Environmental Science

Sponsoring Office: Management Division, Environmental Services Branch, Houston Laboratory

Office Mission/Responsibility: Public servants dedicated to improving and preserving the quality of the environment and protecting human health.

Project Description: The project involves a rapid, sensitive, and direct analysis of sub-microgram amounts of mercury in soil and water samples without wet chemical pre-treatment.

The sampling for mercury analysis is notoriously challenging, as it is difficult to preserve sample integrity especially when associated with complex matrices and process plant applications. Several analytical techniques are designated for mercury determination in soil and water samples. Regardless of the techniques, some sample preparation is usually required. Sample preparation, which is typically the most error-prone and labor-intensive step in the analytical determination of mercury, can be eliminated by direct analysis. The inability of direct analysis gives it an advantage over traditional mercury analysis techniques.

Project Goals: To develop analytical techniques for selected trace elements in soil and water samples using direct analysis. This is an excellent opportunity for student to provide the science information for evaluation of future designs relative to number of samples for an assessment of toxicity. The student will perform the analysis and report the results for a specific region for analysis, based on familiarity or interest.

Desired Level of Education: 1st year graduate student

Project Location: EPA Region 6, Houston, Texas

Preferred Project Period: June 2000 – May 2001

Sponsor Information:
Dave Stockton
Phone: 281 983 2106
Fax: 281 983 2124
E-mail: stockton.dave@epa.gov

Project Number and Category: 2000-3014 Environmental Science

Sponsoring Office: Management Division, Environmental Services Branch, Houston Laboratory

Office Mission/Responsibility: Public servants dedicated to improving and preserving the quality of the environment and protecting human health.

Project Description: The project involves the determination of ultra-trace levels of arsenic and selenium using IC pre-concentration and subsequent detection by ICP-MS.

Arsenic and selenium are both toxic and essential to life. These trace elements occur together in high concentrations in the environment and can accumulate in soil and water samples. Thus, there is a critical need to develop trace element analysis methods that allow separation of the different elemental species prior to trace element detection. In addition, we must now do this analysis at sub-nanogram to picogram quantities. This challenging task requires state-of-the-art sophistication in methods and instrumentation. We have the instrumentation. The methods, and understanding the chemistry of them, provide sources of many research problems. To meet these challenges we are utilizing both IC and ICP-MS methods to provide separation and detection at pg. to sub-pg.

Project Goals: The purpose of this project is to develop and evaluate new methods for sampling determination of environmentally significant inorganic species such as arsenic and selenium at the ultra-level I soil, water and related materials. The student will learn to develop separation, detection, and quantitation of these trace elements in environmental and biological samples using IC in conjunction with ICP-MS and other state-of-the-art equipment. The student will perform the analysis and report the results for specific region, based on familiarity or interest.

Desired Level of Education: 1st year graduate student

Project Location: EPA Region 6, Houston, TX

Preferred Project Period: June 2000 – May 2001

Sponsor Information:
Tim Sanders
Phone: 281 983 2159
Fax: 281 983 2124
E-mail: sanders.timothy@epa.gov

Project Number and Category: 2000-3015 Environmental Science

Sponsoring Office: Management Division, Environmental Services Branch

Office Mission/Responsibility: Public servants dedicated to improving and preserving the quality of the environment and protecting human health.

Project Description: The project involves organic chemistry: comparison of various volatile techniques for oily samples.

Oily samples contain a wide variety of volatile organics and the identification and quantification of these compounds are significantly important to the oil industry. It would be extremely advantageous to have a reliable and efficient method for detection, identification, and quantification of the volatile organic compounds responsible for the unique characteristics in these oils.

The project is to compare the three analytical techniques-methanol extraction with purge and trap, direct injection (dilute and shoot) and headspace to see which gives the best recoveries and most consistent results.

Once the study is complete, we can devise the best method-perhaps MeOH extract with standardization, dilute and shoot with a dedicated GC or injection part or headspace provided we can achieve sensitivity of required targets.

Project Goals: The objective of this project is to understand and quantify factors that involve different volatile analysis techniques. This project involves chemical laboratory studies and local fieldwork to address the above issue. The student will become familiar with volatile analysis extraction techniques, conduct lab experiments, to analyze, and summarize the resulting data.

Desired Level of Education: 1st year graduate student

Project Location: EPA Region 6, Houston, TX

Preferred Project Period: June 2000 – May 2001

Sponsor Information:
Rick McMillin
Phone: 281 983 2107
Fax: 281 983 2124
E-mail: mcmilline.rick@epa.gov

Project Number and Category: 2000-3016 Environmental Science

Sponsoring Office: Environment Services Division, Environmental Assessment Team

Office Mission/Responsibility: Assessment and monitoring of regional environmental condition and trends.

Project Description: To develop landscape indicators of ecological conditions based on the biological integrity of bird communities across Region 7. The central data used in the analyses will come from the North American Breeding Bird Survey. This study will result in several measurable benefits both to the scientific community and to land managers: It will address the utility of using readily available bird community data drawn from the BBS in constructing regional scale indicators of ecological conditions. It will enable estimation of the current status and trends of selected indicators of the Region's ecological resources. Specifically, the student will be expected to: 1) statistically model and estimate metrics such as the species richness of bird communities, relative bird species abundance, and indices of bird community integrity at Breeding Bird Survey census routes across Region 7, 2) aggregate these metrics to watershed or ecoregion scales, and 3) constant statistical predictive models between bird metrics and landscape composition and structure measures within the ecoregions/watersheds in Region 7.

Project Goals: This project will result in a set of statistically defensible environmental indicators derived from readily available national scale data on bird distribution. These indicators will be used to both describe and predict environmental conditions within Region 7 and as a pilot project for national scale efforts.

While this project is specifically targeted at EPA's Region 7, it will serve as a pilot effort for similar efforts in other areas of the U.S. and it will provide critical decision making tools for resource managers at all levels of responsibility. Conducting this project will provide the student investigator with valuable experience in developing environmental indicators from field data and in using statistical and spatial analysis methods in the scientific process.

Desired Level of Education: 2nd year graduate student or above

Project Location: EPA Region 7, Kansas City, KS

Preferred Project Period: June 2000 – March 2001

Sponsor Information:
Walt Foster
Phone: 913 551 7290
Fax: 913 551 9290
E-mail: foster.walt@epa.gov

Project Number and Category: 2000-3017 Environmental Science

Sponsoring Office: Office of Air Quality Planning and Standards

Project Description: The project will involve the collection of data and information that will be used by the student, in the development of a project, to determine odor and waste management controls on constructed wetlands. This information will be correlated with existing data/statistics relating to the management of livestock wastes which leads to a reduction in the amount of greenhouse gas and/or PM and PM precursor emissions produced.

Project Goals: Determination of appropriate plant species and holding ponds for nutrient uptake and odor control in the application of livestock wastes. Attention will be given to effluent application rates, surface and subsurface plant biomass, ammonia emissions, and water quality. Water samples will be taken to determine water quality and the presence of bacteria, nutrients, and other trace mineral occurrences.

Desired Level of Education: Senior

Project Location: EPA, Research Triangle Park, NC

Preferred Project Period: June 2000 - November 2000

Sponsor Information:

Robin Dunkins
Phone: 919 541 5335
Fax: 919 541 5489
E-mail: dunkins.robin@epa.gov

Project Number and Category: 2000-3018 Environmental Science

Sponsoring Office: Office of Research and Development (ORD); National Health and Environmental Effects Research Laboratory (NHEERL)

Office Mission/Responsibility: Reducing scientific uncertainty regarding the environmental and human health effects of environmental agents

Project Description: The student will participate in a comprehensive exposure assessment and epidemiological study of mobile source air pollutants near the border crossings in the El Paso/Ciudad Juarez metropolitan area as part of the Border XXI Project. The student will gain an understanding of the characterization of population exposures to mobile source air pollutants including ultrafine and fine particulate matter, nitrogen dioxide, ozone, petroleum-related volatile organic compounds and other co-pollutants. The student will gain experience in the development of a Geographic Information System to estimate population exposures to ultrafine particulate matter from measurements of gaseous co-pollutants. The student also will assist in the analysis of the respiratory health effects of mobile source air pollutants among school children in the El Paso/Cuidad Juarez metropolitan area. This project will provide a student with valuable experience in the design, conduct and analysis of studies of environmental epidemiology.

Project Goals: Produce a report describing the association of children's respiratory health with mobile source pollutants.

Desired Level of Education: Junior or above

Project Location: Chapel Hill, NC

Preferred Project Period: June 2000 - December 2000. Note: June - August 2000 full-time on site at EPA location in North Carolina; September - December 2000 part-time at student's educational institution.

Sponsor Information:
Lucas M. Neas
Phone: 919 966 9961
Fax: 919 966 7584
E-mail: neas.lucas@epa.gov

Project Number and Category: 2000-3019 Environmental Science

Sponsoring Office: Office of Research and Development, National Exposure Research Laboratory, Human Exposure & Atmospheric Sciences Division

Office Mission/Responsibility: Development of measurement methods for characterization of ambient and human exposure to pollutants.

Project Description: The student will assist in the development of new methods to measure ambient exposure to atmospheric aerosols. Measurement methods will be developed to differentiate aerosol-size distributions and chemical composition. The student will gain experience utilizing state-of-the-art aerosol monitoring equipment.

Project Goals: To test and evaluate new aerosol methodologies. To develop standard operating protocols (SOPs) and quality assurance guidelines.

Desired Level of Education: Junior or above

Project Location: EPA, Research Triangle Park, NC

Preferred Project Period: August 2000 – August 2001

Sponsor Information:
Russell W. Wiener
Phone: 919 541 1910
Fax: 919 541 1153
E-mail: wiener.russell@epamail.epa.gov

Project Number and Category: 2000-3020 Environmental Science

Sponsoring Office: Office of Research and Development (ORD)/National Exposure Research Laboratory (NERL); Environmental Sciences Division (ESD); Environmental Chemistry Branch (ECB)

Office Mission/Responsibility: The mission of ORD is to perform research and development to address current and future environmental problems; to provide responsive technical support to EPA's mission; to integrate the work of ORD's research partners; and to provide leadership in addressing emerging environmental issues and advancing the science and technology of risk assessment and management.

Project Description: To develop a quantitative health and environmental risk assessment of endocrine disrupting compounds (EDCs) and pharmaceuticals in the environment, information on exposures is essential. Since the late 1980's, considerable literature has evolved concerning EDCs and the role they may be playing in decreasing fertility of mammalian and reptilian species and in increasing the incidence of breast and other reproductive-tract cancers. Research begins with determining the levels of suspect EDCs and pharmaceuticals in the environment. These analytes (EDCs and pharmaceuticals) can be broadly classified into two categories: those that can be analyzed by conventional means (e.g., gas chromatography for organics and various elemental analyzers for inorganics), and those that are non-volatile/non-extractable/thermally labile (unconventional). Although many of the EDCs and pharmaceuticals, can be measured in dilute standards, few, if any, EPA methods exist for their measurement in biota or complex environmental media. Current methodologies also may not be sensitive enough to measure low levels of the EDCs and pharmaceuticals in ambient environmental media. New analytical methodologies will be needed to deal with the monitoring and measurement of the EDCs and pharmaceuticals in ambient multimedia environment.

A thorough method development/validation approach will be employed, including literature survey, method selection, development, optimization, and validation. Criteria for optimization and validation will include method detection limit (as estimated by instrument signal-to-noise ratio and, alternatively, by precision of the overall method at low analyte concentration), precision, accuracy, ruggedness, cost, speed of analysis, common availability of instrumentation, and potential for field use. State-of-the-art technologies will be applied to various environmental problems.

Project Goals: 1) Journal articles on the following, but not limited to: Electrospray-Ion Trap Mass Spectrometry Applied to the Speciation and Detection of Suspected EDCs in Water and Biological Matrices; Mass Spectrometric Techniques Applied to Search for Chemical Indicators for Environmental Status; Applications of Multidimensional Separations to the Determinations of Select EDCs; Characterization of Pharmaceuticals in Natural Waters; and 2) Monitoring and Measurement methods for select suspect EDCs in biological, sedimentary, and water matrices.

(continued on next page)

Desired Level of Education: Sophomore or above

Project Location: EPA, Las Vegas, NV

Preferred Project Period: June 2000 - June 2002

Sponsor Information:

Tammy L. Jones-Lepp
Phone: 702 798 2299
Fax: 702 798 2107
E-mail: jones.tammy@epamail.epa.gov

Project Number and Category: 2000-3021 Environmental Science

Sponsoring Office: Office of Research and Development (ORD)

Office Mission/Responsibility: Perform research and development to identify, understand, and solve current and future environmental problems.

Project Description: One of the missions of the EPA's National Exposure Research Laboratory at Las Vegas is to perform research on the characterization, evaluation, measurement, and monitoring of the environment through a multi-disciplinary, multi-media approach that emphasizes field applications. Among field analytical methods, one of the innovative technologies that shows promise for certain environmental applications is termed biosensors.

A biosensor is an analytical device composed of a biological recognition element (e.g. enzyme, receptor, or antibody) attached to a signal transducer (e.g. electrochemical, optical, or piezoelectric) which together relate the concentration of a target analyte to a measurable electrical signal.

Biosensor projects currently underway in our laboratory include: Enzyme-Based Biosensor for Detection of Phenols, Optical Detection of DNA Damage, Enzyme-Based Assays for Detection of Insecticides, and Antibody-based biosensors for Detection of Pesticides.

This project involves the fabrication and use of biosensors for detection of environmental pollutants. This project requires a time commitment of half-time during the school year and full-time during the summer. Skills required include a firm grasp of undergraduate chemistry with laboratory experience.

Product Goals: The student will contribute to the development of a biosensor for the analysis of compounds of environmental and human health concern. The product(s) should be publishable and will further develop his/her career goals and may provide the basis for a Master's Thesis.

Desired Level of Education: Senior or above

Project Location: EPA, Las Vegas, NV

Preferred Project Period: September 2000 – September 2002

Sponsor Information:
Dr. Kim R. Rogers
Phone: 702 798 2299
Fax: 702 798 2107
E-mail: rogers.kim@epamail.epa.gov

Product Number and Category: 2000-3022 Environmental Science

Sponsoring Office: Office of Research and Development (ORD), National Exposure Research Lab, Human Exposure Research Branch

Office Mission/Responsibility: ORDs mission is to develop sound scientific approaches to address environmental problems. The responsibility of the Human Exposure Research Branch-Las Vegas, Immunochemistry Group, is to develop various immunochemical methods for the screening and quantitative analysis of compounds of environmental and human health concern.

Project Description: The Immunochemistry Group is an active participant in the research of new analytical immunochemical technologies. These new analytical technologies are used not only by the regulated community, but also by public and private environmental groups. In addition, the scientific community at large may use products created by the Immunochemistry Group as the basis for further investigation within the fields of immunochemical technologies and effective environmental monitoring.

Areas in which the student may work include: synthesis of immunochemical reagents (e.g., haptens, antigens, and immunogens), immunoassay development, sample preparation, chromatographic detection, and data analysis. Other methods development based on antibody recognition may include immunoaffinity chromatography and/ or immunosensors. Methods will be applied for the detection of residues in foods, environmental matrices such as soil, water, air and human exposure matrices (e.g., urinary biomarkers). The project will be tailored to the student's skills.

Project Goals: The student will contribute to the development of antibody-based analytical methods for the analysis of compounds of environmental and human health concern. The product(s) should be publishable and will further develop his/her career goals and may provide the basis for a Master's Thesis.

Desired level of Education: 1st year graduate student

Project Location: EPA, Las Vegas, NV

Preferred Project Period: September 2000 – September 2002

Sponsor Information:
Jeanete M. Van Emon, Ph.D.
Phone: 702 798 2154
Fax: 702 798 2243
E-mail: vanemon.jeanette@epamail.epa.gov

Project Number and Category: 2000-3023 Environmental Science

Sponsoring Office: Office of Air and Radiation, Radiation and Indoor Environments National Laboratory

Office Mission/Responsibility: Radiation and Indoor Environment's (R&IE's) mission is to protect the public and the environment by minimizing exposure to radiation and indoor air pollution through environmental measurements, applied technologies, and education.

Project Description: EPA's Radiation and Indoor Environments National Laboratory (R&IE's) in Las Vegas has an opportunity for a student to work in the newly developed Ambient Air Program. The student would do laboratory-related work for ambient air sample analysis and will be aiding the community by helping to implement a program which will reduce the exposure of the public to ambient pollutants.

Project Goals: The project would include the development of analytical procedures for R&IE's GC for ambient air analysis. The procedures would include but not be limited to calibration, equipment maintenance, data reduction and assist in developing SOP's. The student would be assigned to a mentor/ project officer for the duration of the assignment. The student would also receive training in ambient air sampling at the R&IE sample platform to become acquainted with the overall program. The student will acquire hands-on experience in the initial set-up and daily operation of a Hewlett Packard Gas Chromatograph. The student will deal with various manufacturers as required in order to successfully operate the HC. The student will learn the protocols required in EPA's Photochemical Assessment Monitoring Sites (PAMS) program and will learn how to apply these protocols in a practical manner. The student will have the opportunity to develop laboratory procedures required to apply the PAMS protocols. Multiple technical documents and technical briefings must be done which will aid the student in learning how to effectively communicate technical information.

Desired Level of Education: Freshman or sophomore

Project Location: EPA, Las Vegas, NV

Preferred Project Period: June 2000 – November 2000

Sponsor Information: Richard Hopper
Phone: 702 798 2447
Fax: 702 798 2465
E-mail: hopper.richard@epa.gov

Project Number and Category: 2000-3024 Environmental Science

Sponsoring Office: Office of Research and Development (ORD)

Office Mission/Responsibility: Perform research and development to address current and future environmental problems

Project Description: The National Park Service and ORD are concerned about possible aeolian transport of pesticides and herbicides from the Central Valley of California to the Sierra Nevada Mountains because the distribution of contaminants appears to be correlated with the disappearance of two species of frogs in this region. One of these species, Rana muscosa (mountain yellow-legged frog) has disappeared from many locations within Yosemite, Sequoia and Kings Canyon National Parks. Sequoia and Kings Canyon are among 14 National Park units comprising the EPA/ NPS Park Research and Inventory Monitoring of Ecosystems Network, which is a network of sites for intensive long-term monitoring of atmospheric pollutants and stress-response research. The student will collect samples along the proposed air transport pathways to sites where Rona muscosa disappearances have been documented. Standard and novel analytical techniques will be employed to quantitatively determine site contamination and draw conclusions regarding the aeolian transport theory. The information gained from the study should be applicable across the mountainous West and could be used to estimate the vulnerability of mountainous aquatic ecosystems to chemical stressors. Travel for sample collection will be necessary. Student's grant will be supplemented to take care of this travel.

Project Goals: The student combines biological principles with analytical chemistry to solve an ecological problem. He or she will gain field experience while operating state-of-the-art analytical equipment. The product(s) should be publishable and further develop his/her career goals.

Desired Level of Education: Senior with plans to obtain advanced degree

Project Location: EPA, Las Vegas, NV

Preferred Project Period: June 2000 - September 2001

Sponsor Information:
Lee Riddick
Phone: 702 798 3204
Fax: 702 798 2142
E-mail: riddick.lee@epa.gov

Project Number and Category: 2000-3025 Environmental Science

Sponsoring Office: Office of Research and Development, National Exposure Research Laboratory, Ecosystems Research Division

Office Mission/Responsibility: The mission of the Office of Research and Development (ORD) is to perform research and development to identify, understand, and solve current and future environmental problems; to provide responsive technical support to EPA's mission; to integrate the work of ORD's scientific partners; and to provide leadership in addressing emerging environmental issues and in advancing the science and technology of risk assessment and risk management.

Project Description: As part of the South Florida Ecosystem Restoration effort, this will be a research project focused on some aspect of the relationships among hydrology, water quality, vegetation and wildlife dynamics and exposures to ecological stresses. Field and literature data, remote sensing and/or existing GIS coverages will be used to develop inputs for models that describe current and future exposures to mercury and other ecological stressors, such habitat or prey availability. Examples of specific research areas/activities include biogeochemistry of mercury, plant/peat nutrient and carbon cycling, food web dynamics, spatial frameworks for ecological process models, remote sensing for plant pigments and biomass.

Project Goals: The product of this project will be either a modeling module, input or framework for spatial predictions of exposures to ecological stressors, consistent with the student's research interests. The product will be publishable as a standalone unit, but also be developed consistent with a framework for model integration.

Desired Level of Education: Senior or above

Project Location: EPA, Athens, GA

Preferred Project Period: June 2000 - May 2001

Sponsor Information: Rochelle Araujo
Phone: 706 355 8133
Fax: 706 355 8104
E-mail: araujo.rochelle@epa.gov

Project Number and Category: 2000-3026 Environmental Science

Sponsoring Office: Office of Research and Development, National Exposure Research Laboratory, Ecosystems Research Division

Office Mission/Responsibility: The mission of the Office of Research and Development (ORD) is to perform research and development to identify, understand, and solve current and future environmental problems; to provide responsive technical support to EPA's mission; to integrate the work of ORD's scientific partners; and to provide leadership in addressing emerging environmental issues and in advancing the science and technology of risk assessment and risk management.

Project Description: Microbial processes in natural environments are known to be important for transformation of natural and anthropogenic chemicals. The primary focus of this research project is to advance our understanding of the importance of microbial reductive transformations in anoxic soils, sediments, and aquifers and to identify predictive tools for estimating transformation pathways and transformation rates. A primary focus of this research task is to examine chemical and microbiological transformations of environmental pollutants under reducing conditions such as iron reducing, and methanogenic conditions. Research will be conducted to describe the kinetics and pathways of chemical and microbial transformation of organic chemicals under reducing conditions and to define the chemical, environmental and biological factors that influence reductive transformations. Results from these studies will further the understanding of natural transformation (natural attenuation) processes in diverse environments and will aid in the development of predictive transformation models.

Project Goals: The student will perform microbial transformation experiments using natural environmental samples to determine rates and pathways of transformation of various organic chemicals; develop analytical expertise for quantitating transformations processes; and understand the important microbial processes responsible for intrinsic microbial transformations.

Desired Level of Education: 2nd year graduate student and above

Project Location: EPA, Athens, GA

Preferred Project Period: June 2000 – June 2001

Sponsor Information:
W. Jack Jones
Phone: 706 355 8228
Fax: 706 355 8202
E-mail: jones.jack@epa.gov

Project Number and Category: 2000-3027 Environmental Science

Sponsoring Office: Office of Research and Development, National Exposure Research Laboratory, Ecosystems Research Division

Office Mission/Responsibility: The mission of the Office of Research and Development (ORD) is to perform research and development to identify, understand, and solve current and future environmental problems; to provide responsive technical support to EPA's mission; to integrate the work of ORD's scientific partners; and to provide leadership in addressing emerging environmental issues and in advancing the science and technology of risk assessment and risk management.

Project Description: Ecological systems are complex in their functioning and are proving to be challenging to depict conceptually and model in both space and time. New techniques for both conceptual and simulation exist that can be applied to natural systems for a more realistic approach. Object-oriented analysis techniques and programming languages focus on the entities of interest, whether individuals or communities or organisms, in a very real way. This differs from the procedural method to modeling in its approach as well as the utility of creating models that are modular and reusable.

The multimedia integrated modeling system is an Office of Research and Development, EPA-wide effort to improve the state-of-the-art in scientific modeling and computing. There are numerous opportunities working with a range of projects, including aquatic and terrestrial systems that apply to this area of research.

Project Goals: To develop new classes of ecological models for risk assessment that are scalable and function over a range of spatial resolutions. Students will gain experience in these new methods and have a choice in their area of emphasis. The initial focus will be on simulating the response of aquatic ecosystems to stresses, such as sediments, habitat loss, toxic chemicals, and nutrient inputs. Within the aquatic system there is opportunity for aquatic plant, invertebrate, and vertebrate community research, as well as the chance to study the relationships of these to changes in land use, human development and agriculture, and nonpoint source pollution.

Desired Level of Education: 1st year graduate student

Project Location: EPA, Athens, GA

Preferred Project Period: June 2000 – May 2001

Sponsor Information:
John M. Johnston
Phone: 706 355 8153
Fax: 706 355 8104
E-mail: johnston.john@epa.gov

Project Number and Category: 2000-3028 Environmental Science

Sponsoring Office: Office of Research and Development, National Exposure Research Laboratory, Ecosystems Research Division

Office Mission/Responsibility: The mission of the Office of Research and Development (ORD) is to perform research and development to identify, understand, and solve current and future environmental problems; to provide responsive technical support to EPA's mission; to integrate the work of ORD's scientific partners; and to provide leadership in addressing emerging environmental issues and in advancing the science and technology of risk assessment and risk management.

Project Description: The Regional Vulnerability Assessment Program (ReVA) of EPA's Office of Research and Development is designed to evaluate the health of ecosystems at a large (multistate) scale and the vulnerability of these systems to potential future system stressors (e.g. population growth, economic expansion, global climate change, technological shifts).

Ecological function is dependent on the spatial distributions of habitat, stressors, species, and communities. Use of satellite data, spatial databases, and geographic information systems are key to ecological assessments on a regional scale. In this project, principles of landscape ecology will be used to evaluate the spatial patterns and future status of land use, land cover, and pollutant distributions and relate them to ecosystem function.

Project Goals: The initial emphasis of the ReVA program is on assessing the vulnerability of ecosystems in the Mid-Atlantic region of the U.S. Substantial data sets and tools for analyzing this data have been developed during the initial phases of this study. The immediate access to tools and data in easily usable formats offers immediate research opportunities for doing landscape scale assessments. The regional nature of the ReVA program offers opportunities for evaluating status and vulnerability of a variety of different ecosystems (e.g. small stream, upland forces, estuarine fisheries). The interested student will gain experience in landscape analysis, using geographical data in data analysis and hypothesis testing, and methods to evaluate relationships of pattern to process with respect to ecological function and land use/cover change. A variety of spatial modeling and statistical analysis techniques will be available to the student to apply to a system of interest within the Mid-Atlantic region.

Desired Level of Education: Junior

Project Location: EPA, Athens GA

Preferred Project Period: June 2000 - May 2001

Sponsor Information: John M. Johnston/Sandra Bird
Phone: 706 355 8153/8124
Fax: 706 355 8104
Email: johnston.john@epa.gov; bird.sandra@epa.gov

Project Number and Category: 2000-3029 Environmental Science

Sponsoring Office: Office of Research and Development, National Exposure Research Laboratory, Ecosystem Research Division

Office Mission/Responsibility: The mission of the Office of Research and Development (ORD) is to perform research and development to identify, understand, and solve current and future environmental problems; to provide responsive technical support to EPA's mission; to integrate the work of ORD's scientific partners; and to provide leadership in addressing emerging environmental issues and in advancing the science and technology of risk assessment and risk management.

Project Description: Phytoremediation of organic pollutants is a new research area that is receiving wide spread attention by government and industry as a way to clean up the environment. Recent work in our laboratory has shown that many organic pollutants can be broken down by aquatic and terrestrial plants in the environment. The types of compounds, the pathways and mechanisms by which plants degrade these pollutants are not well known. The project will consist of experiments to screen organic pollutants with selected plants and to study the enzymatic systems that are responsible for the photo transformation processes. Also, the use of axenic tissue cultures or screening plants will be assessed.

Project Goals: The student will help develop analytical techniques for selected organic pollutants to use in screening plants for Phytoremediation potential. They will select and maintain a variety of plants for use in screening studies. The student will work with whole plants and plant tissue cultures to develop assays for pollutant degradation.

Desired Level of Education: 1st year graduate or above

Project Location: EPA, Athens, GA

Preferred Project Period: June 2000 - May 2001

Sponsor Information:
N. Lee Wolfe
Phone: 706 355 8207
Fax: 706 355 8202
E-Mail: wolfe.lee@epa.gov

Project Number and Category: 2000-3030 Environmental Science

Sponsoring Office: Office of Research and Development, National Exposure Research Laboratory, Ecosystems Research Division

Office Mission/Responsibility: The mission of the Office of Research and Development (ORD) is to perform research and development to identify, understand, and solve current and future environmental problems; to provide responsive technical support to EPA's mission; to integrate the work of ORD's scientific partners; and to provide leadership in addressing emerging environmental issues and in advancing the science and technology of risk assessment and risk management.

Project Description: Zero-valent iron (iron filings) have been shown to degrade a large number of organic compounds in water and soil. The use of zero valent has great potential to degrade chlorinated solvents and chlorinated pesticides to environmentally friendly products at a very low cost. The pathways and mechanisms of these reactions, however, have not been well defined. Further work is needed to carry out mass balances and product distributions in sediment and soil environments.

Project Goals: The student will help develop analytical techniques for selected chlorinated organic pollutants to be screened for reaction with zero valent iron. They will monitor the degradation of chlorinated pesticides in sediment and soil reactions. They will investigate the information of degradation products and reaction variables in heterogenous systems.

Desired Level of Education: 1st year graduate student

Project Location: EPA, Athens, GA

Preffered Project Period: June 2000 - May 2001

Sponsor Information:
N. Lee Wolfe
Phone: 706 355 8207
Fax: 706 355 8202
E-Mail: wolfe.lee@epa.gov

Project Number and Category: 2000-3031 Environmental Science

Sponsoring Office: Office of Research and Development, National Exposure Research Laboratory, Ecosystems Research Division

Office Mission/Responsibility: The mission of the Office of Research and Development (ORD) is to perform research and development to identify, understand, and solve current and future environmental problems; to provide responsive technical support to EPA's mission; to integrate the work of ORD's scientific partners; and to provide leadership in addressing emerging environmental issues and in advance the science and technology of risk assessment and risk management.

Project Description: Zero-valent iron treatment walls for in situ groundwater clean up. Lab and filed investigations will be conducted of the geochemical reaction of natural groundwater, iron metal level, chlorinated solvents (TCE, PCE, etc.) To evaluate long-term performance of reactive walls, precipitations, plugging, kinetics, pathways. Other media, including biometals, may be investigated by geochemists, chemists, and chemical or environmental engineers.

Project Goals: (1) Journal publication or detailed report; (2) QA/QC plan within 30 days and quarterly reports; (3) Lab or field investigation of long-term behavior of iron, pH, alkalinity, precipitates, chlorinated solvents and other factors.

Desired Level of Education: 1st year graduate student; Ph.D. or M.S. candidate preferred

Project Location: EPA, Athens, GA

Preferred Project Period: June 2000 - May 2001

Sponsor Information: Steve McCutcheon
Phone: 706 355 8235
Fax: 706 355 8202

Project Number and Category: 2000-3032 Environmental Science

Sponsoring Office: Office of Research and Development, National Exposure Research Laboratory, Ecosystems Research Division

Office Mission/Responsibility: The mission of the Office of Research and Development (ORD) is to perform research and development to identify, understand, and solve current and future environmental problems; to provide responsive technical support to EPA's mission; to integrate the work of ORD's scientific partners; and to provide leadership in addressing emerging environmental issues and in advance the science and technology of risk assessment and risk management.

Project Description: Phytoremediation investigations-environmental engineers (and allied engineering disciplines), chemists, biochemists, botanists, ecologists, wetland scientists, and others will conduct studies of how plants degrade munitions, chlorinated solvents, pesticides and other organic chemicals in soils and water. Toxicologists will document toxicity to plants and animals from compounds and products. Biochemists will isolate and characterize plant enzymes.

Project Goals: (1) Journal publication or detailed report; (2) QA/QC plan within 30 days and quarterly reports; (3) Lab or field pilot investigation or science investigation of plant enzymes, chemical fate, community and species toxicity.

Desired Level of Education: 1st year graduate student; Ph.D. or M.S. candidate preferred

Project Location: EPA, Athens, GA

Preferred Project Period: June 2000 - May 2001

Sponsor Information: Steve McCutcheon
Phone: 706 355 8235
Fax: 706 355 8202

Project Number and Category: 2000-3033 Environmental Science

Sponsoring Office: Office of Research and Development, National Exposure Research Laboratory, Ecosystems Research Division

Office Mission/Responsibility: The mission of the Office of Research and Development (ORD) is to perform research and development to identify, understand, and solve current and future environmental problems; to provide responsive technical support to EPA's mission; to integrate the work of ORD's scientific partners; and to provide leadership in addressing emerging environmental issues and in advancing the science and technology of risk assessment and risk management.

Project Description: In addition to being useful for chemical analysis, liquid chromatography (LC) both reversed-phase (RP) and normal bonded phase (NBP) can be used to probe the thermodynamics of the partitioning process. LC retention time measurements provide information about the combined nature of the mobile and stationary phases, while independent solution measurements allow the effects of changes in a single-phase composition to be examined independently. In reversed-phase LC it is now clear that retention is governed by a partitioning process, rather than by adsorption. The thermodynamics of solute transfer from the mobile phase to the stationary phase are expressed experimentally in the retention factor k', where $k'=K\phi$, is the product of an equilibrium constant K for this solute transfer process multiplied by the ratio, ϕ. In normal bonded-phase LC the impact of the underlying silica (residual silanols) can control both retention times and selectivity by influencing the character of the bonded phase through hydrogen bonding. Research on retention time measurements with well characterized silica, both bare and with bonded groups of known density and volume, is needed in the development and testing of computational chemistry models that will allow the calculation of HPLC retention times.

Project Goals: This project will provide a mechanism for a student interested in both environmental science and computational chemistry to generate high quality data that the student subsequently use to define and test HPLC retention time calculations. The identification of unknown chemicals in environmental samples is an important issue to the scientific community and chromatographic retention time is an important tool in their identification by spectral/chromatographic based methods.

Desired Level of Education: 1st year graduate student

Project Location: EPA, Athens, GA

Preferred Project Period: June 2000 - June 2001

Sponsor Information:
J. Jackson Ellington
Phone: 706 355 8204
Fax: 706 355 8202
E-Mail: ellington.jackson@epa.gov

Project Number and Category: 2000-3034 Environmental Science

Sponsoring Office: Office of Research and Development, National Exposure Research Laboratory, Ecosystems Research Division

Office Mission/Responsibility: The mission of the Office of Research and Development (ORD) is to perform research and development to identify, understand, and solve current and future environmental problems; to provide responsive technical support to EPA's mission; to integrate the work of ORD's scientific partners; and to provide leadership in addressing emerging environmental issues and in advancing the science and technology of risk assessment and risk management.

Project Description: Uptake and degradation of chemicals by plants is of concern to the scientific community. This interest includes the use of plants to degrade chemicals that pose a threat to the environment. In particular, the fate of agrochemicals applied to food crops is of interest both because of their effects on the ecosystems flora and fauna and the potential human health risk from dietary exposure. The project will require the student to conduct research in both a biological arena and a chemical laboratory. The ultimate fate of a chemical including products of degradation will be monitored in the various plant organs and a mass balance determined. This will require development of an analytical method that may involve gas and liquid chromatography, capillary electrophoresis, and ion chromatography. The former two methods are suitable for the analysis of neutral organics while the latter two methods are particularly suitable for the analysis of anions such as perchlorate. Perchlorate is a large polarizable anion that has been shown to have a high potential for assimilation by plants. The student will develop methods to monitor the fate of perchlorate and/or similar chemicals and their products of degradation at the microgram per kilogram level in plant tissue.

Project Goals: To provide a research opportunity for a student with an interest in environmental science. The data and knowledge generated should be of quality suitable for use in fulfilling an advanced academic degree requirement and for publication in a scientific journal.

Desired Level of Education: 1st year graduate student

Project Location: EPA, Athens, GA

Project Period: June 2000 - June 2001

Sponsor Information:
J. Jackson Ellington
Phone: 706 355 8204
Fax: 706 355 8202
E-Mail: ellington.jackson@epa.gov

Project Number and Category: 2000-3035 Environmental Science

Sponsoring Office: Office of Research and Development, National Exposure Research Laboratory, Ecosystems Research Division

Office Mission/Responsibility: The mission of the Office of Research and Development (ORD) is to perform research and development to identify, understand, and solve current and future environmental problems; to provide responsive technical support to EPA's mission; to integrate the work of ORD's scientific partners; and to provide leadership in addressing emerging environmental issues and in advancing the science and technology of risk assessment and risk management.

Project Description: Many pesticides found in the environment are chiral and, therefore, can exist as sets of optically active isomers called enantiomers. These include o,p'-DDT, certain toxaphene and chlordane congeners, some of the organophosphorus compounds, and other pesticides. Biological systems are generally enantiomerically selective; i.e., one isomer will be more bioavailable or toxic than the other. In addition, one of them will degrade faster than the other by microbial pathways. The project will consist of experiments to follow the degradation processes of chiral pesticides in various environmental matrices to determine the degree of enantioselectivity of the processes.

Project Goals: The student will help develop analytical techniques based on gas chromatography with chiral columns or chiral capillary electrophoresis to separate the enantiomers of chiral pesticides. These techniques will be applied to real or simulated environmental samples spiked with or known to contain the chiral pesticide(s) to determine the extent of enantiomeric selectivity of the environmental system.

Desired Level of Education: 1st year graduate student or above

Project Location: EPA, Athens, GA

Preferred Project Period: June 2000 - June 2001

Sponsor Information:
Arthur W. Garrison, Ph.D.
Phone: 706 355 8219
Fax: 706 355 8202
E-Mail: garrison.arthur@epa.gov

Project Number and Category: 2000-3036 Environmental Science

Sponsoring Office: Office of Research and Development, National Exposure Research Laboratory, Ecosystems Research Division

Office Mission/Responsibility: The mission of the Office of Research and Development (ORD) is to perform research and development to identify, understand, and solve current and future environmental problems; to provide responsive technical support to EPA's mission; to integrate the work of ORD's scientific partners; and to provide leadership in addressing emerging environmental issues and in advancing the science and technology of risk assessment and risk management.

Project Description: In freshwaters and coastal environments most of the carbon and nitrogen is incorporated in refractory biopolymers, including humic substances, that are part of the dissolved organic matter (DOM). It has been shown that biologically-available organic substances are produced by the photodegradation of DOM by sunlight, but little is known about the effects of changing climatic conditions and UV radiation on the nature and rates. This project involves the determination of the rates and photoproducts and the spectral changes that occur in the UV absorption spectrum and fluorescence of the DOM upon UV irradiation. Results of this project will be used to evaluate the effects of DOM photodegradation on carbon and nutrient cycling in the aquatic environment, will allow deductions regarding the photolysis mechanism, and will provide data essential to the modeling of the effects of UV-B radiation on coastal carbon and nutrient cycles.

Project Goals: (1) Participate in field trips that involve the collection of samples and determination of the depth dependence of DOM photodegradation in riverine, estuarine, and coastal environments; (2) use known techniques to extract, concentrate, identify, and quantitate the amines produced by DOM photodegradation in water, including HPLC or capillary electrophoresis (CE) methods and adaption of existing amino acid derivatization techniques to enhance sensitivity for detection by UV or fluorescence detectors; (3) determine rates of amine photoproduction as a function of water composition (pH, DOM concentration, iron content, salinity), wavelength and tempurature; (4) conduct library research on scientific literature related to UV-B radiation, DOM photodegradation, and tract amine measurements in natural waters.

Desired Level of Education: 1st year graduate student or above

Project Location: EPA, Athens, GA

Preferred Project Period: June 2000 - May 2001

Sponsor Information:
Richard G. Zepp, Ph.D.
Phone: 706 355 8117
Fax: 706 355 8104
E-Mail: zepp.richard@epa.gov

Project Number and Category: 2000-3037 Environmental Science

Sponsoring Office: Office of Research and Development, National Exposure Research Laboratory, Ecosystems Research Division

Office Mission/Responsibility: The mission of the Office of Research and Development (ORD) is to perform research and development to identify, understand, and solve current and future environmental problems; to provide responsive technical support to EPA's mission; to integrate the work of ORD's scientific partners; and to provide leadership in addressing emerging environmental issues and in advancing the science and technology of risk assessment and risk management.

Project Description: Solar UV-B radiation is believed to have important effects on coral assemblages, but little is known about factors that affect the UV-B exposure of corals. This projects is designed to provide improved understanding of factors that influence the penetration of solar UV-B radiation into marine waters overlying corals, including microbial and abiotic transformation that affect the UV-absorbing dissolved and particulate components of marine environments. Results of the studies will be used in conjunction with related biological studies of UV-induced DNA damage to help evaluate the role played by UV radiation in the decline of corals in tropical marine environments.

Project Goals: (1) Participate in field trips to the Florida Keys to measure solar spectral irradiance in the UV region as a function of depth over coral; (2) identify and quantify the dissolved and particulate constituents of the waters overlying the corals that are responsible for UV light attenuation; (3) conduct studies to determine the effects of microbial and photochemical degradation on the UV absorption spectra of the dissolved organic matter; (4) determine the effects of UV-B radiation on the bioavailability of carbon and nitrogen-containing compounds in water obtained from the Florida Keys sites.

Desired Level of Education: 1st year graduate student or above

Project Location: EPA, Athens, GA

Preferred Project Period: June 2000 - May 2001

Sponsor Information:
Richard G. Zepp, Ph.D.
Phone: 706 355 8117
Fax: 706 355 8104
E-Mail: zepp.richard@epa.gov

Project Number and Category: 2000-3038 Environmental Science

Sponsoring Office: Office of Research and Development, National Exposure Research Laboratory, Ecosystems Research Division

Office Mission/Responsibility: The mission of the Office of Research and Development (ORD) is to perform research and development to identify, understand, and solve current and future environmental problems; to provide responsive technical support to EPA's mission; to integrate the work of ORD's scientific partners; and to provide leadership in addressing emerging environmental issues and in advancing the science and technology of risk assessment and risk management.

Project Description: The fellow will investigate the development and application of an analytical device for concentrating organic chemicals in water for analysis by Raman spectroscopy. The device will directly couple to a Raman fiber-optic probe and be amenable to remote sampling. The device will be based on semi-permeable membranes, which are capable of concentrating certain organics by orders of magnitude. The device will be developed by the fellow and evaluated for application to identification, quantification, and speciation of complex organics in water.

Project Goals: Within the last few years, Raman spectroscopic instrumentation has made great strides in sensitivity, portability, and applicability. It is now becoming feasible to apply this technology to environmental analysis- which can profit greatly from the unique advantages of the Raman technique (amenable to aqueous samples, no sample preparation required, non-invasive sample, etc.). However, most of the instrumental components of the modern Raman spectrometer have now 'topped-out' in their developmental paths, and Raman spectroscopy (in spite of its recent strides) is not quite sensitive enough for many 'real world' applications. Now is the time to investigate analyte concentration devices that can directly couple to Raman probes to push the effective sensitivity to levels required for environmental analysis. The long-range goal of this project is to produce such a device. The fellow would learn state-of-the-art analytical techniques that are enjoying tremendous growth in popularity for academic, industrial, and government research and development applications. If the development is successful, the general scientific community applying Raman spectroscopy to the analysis of aqueous samples would benefit from this development.

Desired Level of Education: 1st year graduate student or above

Project Location: EPA, Athens, GA

Preferred Project Period: June 2000 - May 2001

Sponsor Information:
Tim Collette
Phone: 706 355 8211
Fax: 706 355 8202
E-Mail: collett.tim@epa.gov

Project Number and Category: 2000-3039 Environmental Science

Sponsoring Office: Office of Research and Development, National Exposure Research Laboratory, Ecosystems Research Division

Office Mission/Responsibility: The mission of the Office of Research and Development (ORD) is to perform research and development to identify, understand, and solve current and future environmental problems; to provide responsive technical support to EPA's mission; to integrate the work of ORD's scientific partners; and to provide leadership in addressing emerging environmental issues and in advancing the science and technology of risk assessment and risk management.

Project Description: Terrestrial ecosystem functioning is largely governed by the soil microbial community through soil organic matter decomposition and nutrient cycling. Terrestrial soil microbial populations also play an important role in the biogeochemical cycles of the key greenhouse gases carbon dioxide, methane, and nitrous oxide. Changes in the structure of the soil microbial community can be a valuable indicator of ecosystem response to a variety of natural and anthropogenic stressors such as seasonal and longer-term variation of temperature and moisture, fire, land-use change, and chemical contamination. One way to assess the shift in the microbial community structure is through the analysis of phospholipid fatty acids, which are useful indicators of microbial biomass and specific microbial groups. We anticipate that the intern would be involved in one or more aspects of the overall project: (1) extraction and analysis of bacterial fatty acids from soils; (2) fractionation of soils into different size fractions using wet sieving techniques; or (3) evaluation of storage and analytical methodology considerations associated with analysis of bacterial fatty acids in environmental samples.

Project Goals: To develop expertise in measuring and understanding the use of bacterial fatty acid composition to study microbial communities in environmental matrices. To understand the role of microbial communities in ecosystem functioning.

Desired Level of Education: Junior

Project Location: EPA, Athens, GA

Preferred Project Period: June 2000 - May 2001

Sponsor Information: Roger Burke/Marirosaa Molina
Phone: 706 355 8134/706 355 8113
Fax: 706 355 8104
E-Mail: burke.roger@epa.gov

Project Number and Category: 2000-3040 Environmental Science

Sponsoring Office: Office of Research and Development, National Exposure Research Laboratory, Ecosystems Research Division

Office Mission/Responsibility: The mission of the Office of Research and Development (ORD) is to perform research and development to identify, understand, and solve current and future environmental problems; to provide responsive technical support to EPA's mission; to integrate the work of ORD's scientific partners; and to provide leadership in addressing emerging environmental issues and in advancing the science and technology of risk assessment and risk management.

Project Description: Evaluation of Field Data for Biodegradation. Certain subsurface contaminants have been shown commonly to under go unassisted biodegradation. Field data sets consisting of contaminant and electron acceptor/metabolic byproduct reflect biodegradation along with other contaminant transport processes, including sorption, dispersion and release of mass from source zones. Assessing field data for biodegradation requires the application of data evaluation methodologies and simulation models. A variety of methods may be required to apply to a given site in order to account for uncertainty in both the data sets and the models themselves. By evaluating fundamental transport and transformation behavior at a variety of sites general information concerning contaminant behavior can be developed. This information is needed by state regulatory agencies, contaminated site owners and the general public in order to make rational decisions concerning site remediation.

Project Goals: The goal of this project is to develop and/or apply existing models and assessment methodologists to several well characterized field sites that are currently under investigation. Products may include advanced methodologies, models, analyses of example field sites and/or generalized analyses of transport and transformation.

Desired Level of Education: 1st year graduate

Project Location: EPA, Athens, GA

Preferred Project Period: October 2000 - October 2001

Sponsor Information:
James W. Weaver, Ph.D.
Phone: 706 355 8329
Fax: 706 355 8302
E-Mail: weaver.james@epa.gov

Project Number and Category: 2000-3041 Environmental Science

Sponsoring Office: National Health and Environmental Effects Research Laboratory-Atlantic Ecology Division

Office Mission/Responsibility: The mission of the Atlantic Ecology Division at Narragansett is to perform research to better understand and quantify the ecological effects of anthropogenic stressors on the coastal waters and watersheds of the Atlantic seaboard.

Project Description: Several types of anthropogenic contaminants can cause stress to marine systems. This project conducts research to develop methods for identifying specifically which contaminants are causing observed stress. Generally, the type of stress measured is mortality; however, other endpoints are of interest. Stressors include organic chemicals, metals and ammonia. The NNEMS student will be directly involved in the development of these methods. After appropriate orientation to the problem, the student will choose a project of interest and (with oversight by our staff) be responsible for all phases of the research including animal and sample collection, performing toxicity tests, statistical analysis and report writing. By the end of the project, the student will be aware of all the steps necessary to perform and interpret toxicity tests for regulatory and scientific purposes. A good background in biology and chemistry including organic chemistry laboratory is necessary. Prior laboratory experience is helpful.

Project Goals: The primary goal of this project is to allow the NNEMS student to participate in the performance of real research. Objectives of this research are to develop tools for identifying causes of ecological stress.

Desired Level of Education: Senior or above

Project Location: EPA, Narragansett, RI

Preferred Project Period: May 2000 - May 2001

Sponsor Information:
Kay Ho
Phone: 401 782 3196
Fax: 401 782 3030
E-Mail: ho.kay@epa.gov

Project Number and Category: 2000-3042 Environmental Science

Sponsoring Office: National Health and Environmental Effects Research Laboratory-Atlantic Ecology Division

Office Mission/Responsibility: The mission of the Atlantic Ecology Division at Narragansett is to perform research to better understand and quantify the ecological effects of anthropogenic stressors on the coastal waters and watersheds of the Atlantic seaboard.

Project Description: The project relates nutrient inputs to water quality in an estuary. The time scale of interest is one year to decades. The project includes reviewing and assembling data from the literature and existing databases, analyzing and interpreting seasonal contributions to an annual nutrient budget, and summarizing and interpreting long-tern trends.

After familiarization with the project, the student will, with guidance from staff, choose an area of research within the scope of the project and participate in study design, data analysis, and reporting of results and conclusions.

Project Goals: The student will learn to complete assembly, analysis, interpretation, and reporting of a data set relevant to the project area of research.

Desired Level of Education: Junior or above

Project Location: EPA, Narragansett, RI

Project Period: June 2000 - June 2001

Sponsor Information:

Edward Dettmann
Phone: 401 782 3039
Fax: 401 782 3030
E-Mail: dettmann.edward@epa.gov

Project Number and Category: 2000-3043 Environmental Science

Sponsoring Office: National Health and Environmental Effects Research Laboratory-Atlantic Ecology Division

Office Mission/Responsibility: The mission of the Atlantic Ecology Division at Narragansett is to perform research to better understand and quantify the ecological effects of anthropogenic stressors on the coastal waters and watersheds of the Atlantic seaboard.

Project Description: This project is aimed at the identification and evaluation of biogeochemical markers in marine sediments to determine their utility as useful indicators of historical change in estuaries. Various biochemical markers are being evaluated including stressor indicators such as xenobotic compounds, organic carbon, sulfer, and stable carbon isotopes. In addition, ecological indicators such as sediment texture, iron-sulfer speciation, and sedimentary pigments are being considered. After familiarization with the project, the student will choose an area of research within the scope of the project. He or she will be responsible for study design, implementation, data analysis, and scientific reporting of the results and conclusions.

Project Goals: To determine the efficacy of biogeochemical markers in marine sediments as indicators of system stress and ecological effects. The project involves the collection of sediment and sediment cores in coastal systems and their analysis for various biogeochemical markers.

Desired Level of Education: 1st year graduate student or above

Project Location: EPA, Narragansett, RI

Preferred Project Period: June 2000 - March 2001

Sponsor Information:
James S. Latimer
Phone: 401 782 3167
Fax: 401 782 3030
E-Mail: latimer.jim@epa.gov

Project Number and Category: 2000-3044 Environmental Science

Sponsoring Office: National Health and Environmental Effects Research Laboratory-Atlantic Ecology Division

Office Mission/Responsibility: The mission of the Atlantic Ecology Division at Narragansett is to perform research to better understand and quantify the ecological effects of anthropogenic stressors on the coastal waters and watersheds of the Atlantic seaboard.

Project Description: It has been well demonstrated that persistent organic and inorganic contaminants accumulate in marine systems. These contaminants include organic pollutants such as PCBs, PAHs, pesticides and dioxins as well as inorganic toxicants like mercury and lead. Accumulation occurs both in the bottom sediments and resident organisms. Bioaccumulation is especially well documented in benthic organisms and our ability to measure and model this phenomenon is established. The toxic effects of bioaccumulated pollutants to individual organisms has also been investigated in a small number of studies. This project involves relating bioaccumulation of anthropogenic contaminants to adverse ecological effects in the benthos. These effects may include endpoints ranging from increased species mortality to disruptions of benthic diversity. The objective of this research is to develop predictive tools for relating bioaccumulation to the deterioration of benthic habitats.

Specific activities for the NNEMS student include conducting laboratory and field experiments to determine the ecological effects of bioaccumulation. The student will collect marine organisms for laboratory studies, prepare samples for chemical analysis, analyze data for toxicological and ecological trends, and review the scientific literature.

Project Goals: Results of this research will allow us to better understand the relationship between bioaccumultion of persistent pollutants and their adverse ecological effects in marine systems with an emphasis on the benthos. The NNEMS student will benefit by designing, organizing and performing a research project with toxicological, ecological and chemical facets. At the conclusion of the project, the NNEMS student will prepare a report summarizing their research.

Desired Level of Education: 1st year graduate student or above

Project Location: EPA, Narragansett, RI

Preferred Project Period: June 2000 - June 2001

Sponsor Information:
Robert M. Burgess
Phone: 401 782 3106
Fax: 401 782 3030
E-Mail: burgess.robert@epa.gov

Project Number and Category: 2000-3045 Environmental Science

Sponsoring Office: National Health and Environmental Effects Research Laboratory-Atlantic Ecology Division

Office Mission/Responsibility: The mission of the Atlantic Ecology Division at Narragansett is to perform research to better understand and quantify the ecological effects of anthropogenic stressors on the coastal waters and watersheds of the Atlantic seaboard.

Project Description: We are developing methods to assess estuarine health using juvenile fish and their habitats. Areas of research include:
• Using fish growth rates to assess habitat quality
• Collating and analyzing historical fish survey data to look for relationships between fish communities and human impacts.
• Conducting field work to measure fish habitat parameters, such as sediment type, vegetation, and water quality.
• Correlating fish collections with fish habitat measurements

Examples of projects include measuring fish growth rates in large cages placed in several locations with varying degrees of human impact and developing an index of estuarine health based on the diversity of fish species captured. Most of the work is conducted outdoors from boats or in shoreline locations. Some sample analysis is done in the laboratory.

After becoming familiar with the project, the student will choose an area of research within the topic and be responsible for designing, implementing and summarizing the study.

Project Goals: To participate in developing methods of using fish communities and fish habitats to understand and quantify varying degrees of human impacts in estuaries and coastal areas. The methods developed are also expected to allow some ability to predict the effects of human activities on fish communities and estuarine ecosystems.

Desired Level of Education: Junior or above

Project Location: EPA, Narragansett, RI

Preferred Project Period: June 2000 - September 2000

Sponsor Information:
Lesa Meng
Phone: 401 782 9618
Fax: 401 782 3030
E-Mail: meng.lesa@epa.gov

Project Number and Category: 2000-3046 Environmental Science

Sponsoring Office: National Health and Environmental Effects Research Laboratory-Atlantic Ecology Division

Office Mission/Responsibility: The mission of the Atlantic Ecology Division at Narragansett is to perform research to better understand and quantify the ecological effects of anthropogenic stressors on the coastal waters and watersheds of the Atlantic seaboard.

Project Description: This purpose of this project is to characterize long- or short-term responses of aquatic ecosystems to anthropogenic stress. Research will focus on adaptive and compensatory responses at multiple levels of biological organization, ranging from the molecular to the community levels. The student will develop an increased awareness of environmental problems and techniques used to solve them.

Project Goals: Experimental studies will be conducted to compare responses in animal and plant species indigenous to more or less stressful environments. Investigations may include field collection and characterization activities as well as wet dry lab work on organisms and populations. Biological (e.g., genetics, biochemistry, physiology, behavior) as well as ecological measurement techniques will be used.

Desired Level of Education: 1st year graduate student or above

Project Location: EPA, Narragansett, RI

Preferred Project Period: June 2000 - June 2001

Sponsor Information:
Diane Nacci
Phone: 401 782 3143
Fax: 401 782 3030
E-Mail: nacci.diane@epa.gov

Project Number and Category: 2000-3047 Environmental Science

Sponsoring Office: Office of Research and Development, Mid-Continent Ecology Division

Office Mission/Responsibility: Assess Ecological Condition of Freshwater Ecosystems

Project Description: Evaluate watershed level variables and their influence on nutrient dynamics in selected streams within the western arm of Lake Superior Basin where considerable data has been collected. This project will be an opportunity for a graduate level student to work with scientists on a landscape level research study, while developing and conducting independent research compatible with that study. Other benefits to the student include access to an extensive database to support the student's independent research. The student is expected to complete a final report of the project which will include a description of the project, methods used, results and a discussion of the results. This project will contribute information for determining how watershed characteristics affect instream nutrient dynamics.

Project Goals: Determine algal biomass and nitrogen, phosphorus and silica limitations using artificial substrates and/or determine abiotic and uptake components of nitrogen spiraling lengths in streams, in watersheds of varying forested and wetland extent and different substrate types.

Desired Level of Education: 1st year graduate student or above

Project Location: EPA, Duluth, MN

Preferred Project Period: June 2000 - October 2000

Sponsor Information: Jo Thompson/Naomi Detenbeck
Phone: 218 529 5198
Fax: 218 529 5003
E-mail: thompson.jo@epamail.epa.gov

Project Number and Category: 2000-3048 Environmental Science

Sponsoring Office: Office of Research and Development, Mid-Continent Ecology Division

Office Mission/Responsibility: Assess ecological condition of freshwater ecosystems.

Product Description: Conduct field work evaluating spatial and temporal patterns of nutrient limitation in Lake Superior coastal wetlands by examining algal response to nutrient additions. Project is expected to result in a manuscript or report on which the student is first author or co-author.

Project Goals: Nutrient limitation information would contribute to larger project examining water chemistry patterns in coastal wetlands and their relationship to wetland hydrology and morphology. This information will contribute to the scientific understanding regarding the role that coastal wetlands play in regulating nutrient transmission from the watershed to the receiving lakes. The student will have the opportunity to design, carry out, and analyze the results of self-directed research as well as participate as part of an established research team.

Desired Level of Education: Senior or above

Project Location: EPA, Duluth, MN

Preferred Project Period: June 2000 – November 2000

Sponsor Information: Anett Trebitz/John Morrice
Phone: 218 529 5209/ 5210
Fax: 218 529 5003
E-mail: trebitz.anett@epa.gov

Project Number and Category: 2000-3049 Environmental Science

Sponsoring Office: Office of Research and Development, Mid-Continent Ecology Division

Office Mission/Responsibility: Assess ecological conditions of freshwater ecosystem

Project Description: Determine the seasonal distribution and movement of larval fish between a Great Lakes coastal wetland and it's adjacent bay. The student will produce a report and/or a journal article based on these results that will demonstrate expertise in coastal wetland fish ecology and advance our state of knowledge about Great Lakes fishes.

Project Goals: To increase understanding of larval fish community ecology in Great Lakes coastal wetlands, especially with respect to changes in seasonal distribution and movement within and between different habitats.

Desired Level of Education: 1st year graduate student or above

Project Location: EPA, Duluth, MN

Preferred Project Period: June 2000 – October 2000

Sponsor Information:
John Brazner
Phone: 218 529 5207
Fax: 218 529 5003
E-mail: brazner.john@epamail.epa.gov

Project Number and Category:	2000-3050 Environmental Science
Sponsoring Office:	Office of Research and Development, Mid-Continent Ecology Division
Office Mission/Responsibility:	Assess ecological conditions of freshwater ecosystem
Project Description:	Determine the seasonal distribution patterns of invertebrates in Great Lakes coastal wetlands. The student will produce a report and/or a journal article based on these results that demonstrates expertise in coastal wetland invertebrate ecology and advance our state of knowledge related to invertebrates in the Great Lakes.
Project Goals:	Understand the function of different microhabitats in coastal wetlands for zooplankton and macroinvertebrates to provide insights into the ecology of larval fishes that also occupy these habitats.
Desired Level of Education:	1st year graduate student or above
Project Location:	EPA, Duluth, MN
Preferred Project Period:	June 2000 – October 2000
Sponsor Information:	John Brazner Phone: 218 529 5207 Fax: 218 529 5003 E-mail: brazner.john@epamail.epa.gov

Project Number and Category: 2000-3051 Environmental Science

Sponsoring Office: Office of Research and Development

Office Mission/Responsibility: Research and Development

Project Description: Investigation of the effects of interactive stresses on the plant/litter/soil systems. In order to test hypotheses relating to carbon cycling rates in both these studies, and to provide information for simulation models, detailed measurements of needle gas exchange rates are required including photosynthetic, respiration and transpiration rates with different light (photosynthetically active radiation) levels, temperature levels, carbon dioxide levels and in different seasons. In addition, respiration rates of woody tissues (branches and stems from both living and dead tissues) would provide information on carbon fluxes from non-photosynthetic tissues. The focus would be on Ponderosa pine, with ancillary measurements on additional species such as Douglas fir.

The intended product of this fellowship will be an individual research project in the area of interactive stresses and plant/litter/soils systems which meets the students needs in terms of an undergraduate or graduate internship or research project. The recipient may use the results in a research report, publication to be submitted for peer review and journal publication, or whatever vehicle that best suits their educational needs. The primary focus of the project will be to provide the student with experience in ecological research and will advance their interest in their field of study. Through the increasing the individual experience of the student and production of new research information, this project will benefit the greater environmental science field and professional community.

Project Goals: This research will provide unique information on the responses of ecosystem functions (carbon, nitrogen and water cycling) related to the interactions of two major photochemical pollutant and greenhouse gases, tropospheric 03 and C02, as well as assist in the development of ecological indicators. The associate would develop measurement techniques and carryout measurements of gas exchange using infrared gas analyzers and other state-of-the-art equipment.

Desired Level of Education: Sophomore or above

Project Location: EPA, Corvallis, OR

Preferred Project Period: June 2000 – June 2002

Sponsor Information: David Olszyk
Phone: 541 754 4397
Fax: 541 754 4799
E-mail: daveo@mail.cor.epa.gov

Project Number and Category: 2000-3052 Environmental Science

Sponsoring Office: Office of Research and Development

Office Mission/Responsibility: Research and Development

Project Description: This project uses dendrochronological methods (coring trees, preparing cores, counting and crossdating cores, measuring and analyzing ring patterns) to produce a master chronology from many trees at an experimental forest.

Project Goals: Learn dendroecological research methods and provide scientific researchers with standards for comparison with their own tree growth patterns.

Desired Level of Education: 1st year graduate student or above

Project Location: EPA, Corvallis, OR

Preferred Project Period: June 2000 – September 2001

Sponsor Information:
Allen Solomon
Phone: 541 754 4772
Fax: 541 754 4799
E-mail: solomon@mail.cor.epa.gov

Project Number and Category: 2000-3053 Environmental Science

Sponsoring Office: Office of Research and Development

Office Mission/Responsibility: Research and Development

Project Description: The student will develop a research project related to anthropogenic stressors, which jeopardize important resources in Pacific Northwest (PNW) estuaries. Relevant stressors would include watershed alterations (e.g., urbanization, land use, agriculture, and forestry practices) resulting in changes in nutrient and sediment loads to estuaries' habitat loss and alteration (e.g., land fill and dredging), planned and unplanned biotic introductions, pollution, and anthropogenic caused harmful algal blooms.

Project Goals: The project goal is to develop stressor response-relationships for estuarine sources. The project will be performed in coordination with other research to determine the cumulative effect of multiple anthropogenic and natural stressors on ecologically and economically sensitive resources in PNW estuaries.

Desired Level of Education: 1st year graduate student

Project Location: EPA, Newport, OR

Preferred Project Period: June 2000 – July 2001 (This project can go up to 2 years part-time.)

Sponsor Information:
Walter G. Nelson
Phone: 541 867 4041
Fax: 541 867 4049
E-mail: nelson.walter@epa.gov

Public Relations and Communications

Topics in this category include the review and analysis of public response to EPA policies and regulations, as well as general public opinion of environmental issues. Also included in this category is the development of communication tools ranging from pamphlets and training materials to slide and film presentations in order to inform and educate the public on environmental protection issues.

Project Number and Category: 2000-4001 Public Relations and Communications

Sponsoring Office: Office of Solid Waste and Emergency Response (OSWER), Office of Emergency and Remedial Response (OERR, Superfund)

Office Mission/Responsibility: The mission of the Superfund program is to reduce the risk to people and the environment by cleaning up the nation's worst hazardous waste problems. The mission of the Superfund Community involvement program is to advocate and strengthen early and meaningful community participation during Superfund cleanups.

Project Description: This project with the community Involvement and Outreach Center asks the student to become familiar with the Superfund process and to become active in promoting community involvement programs. The Superfund Involvement Community Program seeks to build capacity in communities so they can effectively participate in the Superfund program.

Building community capacity focuses primarily around providing technical assistance to communities and providing opportunities to establishing community advisory groups where site related issues can be discussed and resolved. In addition, the Community Involvement and Outreach Center works to establish dialogues with the public on critical issues facing the Superfund program such as issues dealing with relocations and redevelopment of Super-fund sites.

The specific project will depend on emerging issues at the time of the application and selection. Students applying for this fellowship must have good writing skills and be able to perform basic research, critical analysis, and synthesis of information from multiple sources. In addition, the students should have knowledge of community involvement and conflict resolution.

Project Goals: To help the student learn the critical issues facing a government agency as it seeks to involve the public in decision making. The student will learn to analyze an emerging topic, and work with the staff on developing strategies for dealing with the topic.

Desired Level of Education: Undergradute or graduate

Project Location: EPA Headquarters, Arlington, VA and Washington, DC

Preferred Project Period: 3 months - 1 year beginning June 2000

Sponsor Information: Suzannne Wells
Phone: 703 603 8863
Fax: 703 603 9100
E-mail: wells.suzanne@epamail.epa.gov

Project Number and Category: 2000-4002 Public Relations and Communications

Sponsoring Office: Office of Solid Waste

Office Mission/Responsibility: The Office of Solid Waste (OSW) operates under authority of the Resource Conservation and Recovery Act. We protect human health and the environment by ensuring responsible national management of hazardous and nonhazardous waste. Our goals are: 1) to conserve resources by reducing waste; 2) to prevent future waste disposal problems by writing result-oriented regulations; and 3) to clean up areas where waste may have spilled, leaked, or been improperly disposed of. Individual states adopt federal standards and operate their own waste management programs.

Project Description: Research and compile existing information on RCRA and make information available to the public. Communication of RCRA programs and regulations is a critical component to environmental protection. The student will identify information on solid waste and investigate methods for making this information available to the public.

Tasks and End Products:
• Research waste related information on the Internet and make recommendations on appropriate links to this information.
• Research the content and test the functionality of public information products on waste management. Make recommendations for improvements to these products. Identify improvements for making information more readily available to the public. Present recommendations to EPA staff.
• Provide test results for OSW web sites. This includes: Providing recommendations for web page links and testing the usability of OSW Web sites to enhance public access to information.

The student will acquire applicable experience in all aspects of information product development. Obtain or expand hands-on computer and Internet research skills. Build on communication and presentation skills from demonstrating information products to customers. Obtain a broad knowledge of environmental regulations and programs.

Scientists use data and information provided in products developed by OSW to make waste management decisions for the businesses or communities they represent. Access to OSW information in a user friendly format is critical in completing their tasks. Businesses and communities need information shared by OSW to contribute to their waste management plans and ensure compliance with federal regulations. The educational community uses OSW information products to teach students about waste management techniques in the home while increasing students' computer skills by using automated products. The general public benefits directly by making informed decisions and participating in waste related issues in their communities and indirectly from a clean environment.

(continued on next page)

Project Goals:	Become knowledgeable and obtain experience in communicating federal regulations and programs on solid waste to the regulated community and the public using the latest technology. Promote access to RCRA information by making information available in different formats and media.
Desired Level of Education:	Senior
Project Location:	EPA Headquarters, Alexandria, VA
Preferred Project Period:	June 2000 – October 2000
Sponsor Information:	Barbara Roth Phone: 703 308 7890 Fax: 703 308 7904 E-mail: roth.barbara@epa.gov

Project Number and Category: 2000-4003 Public Relations and Communications

Sponsoring Office: Office of Enforcement, Compliance and Environmental Justice

Office Mission/Responsibility: Coordinating the use of enforcement and compliance assistance among EPA Regional programs and the states, enforcing against violators of more than one law, and promoting equal public health and environmental protection for all in the Mid-Atlantic area.

Project Description: The student will gain an understanding of businesses and environmental matters by surveying facilities to determine the impact of compliance assistance/outreach project(s) on motivating facilities to improve environmental performance. The student will also gain experience in surveying, analyzing results, developing a report; and presenting the results to a group of people. The project will involve reviewing similar surveys, learning about regulatory requirements that are the subject of the compliance assistance, developing a survey plan including the facilities to be surveyed, formatting the survey, conducting the survey by phone and/or mail, using survey software to develop a report with charts and graphs, and presenting the results to EPA Region III enforcement and compliance people. This project will provide a student with valuable experience in learning about environmental requirements, measuring results and surveying techniques. Note: EPA will clear the survey questions through OMB prior to the student's start date.

Project Goals: Produce a report on the results of a Region III compliance assistance outreach project.

Desired Level of Education: Junior or above

Project Location: EPA Region 3, Philadelphia, PA

Preferred Project Period: June 2000 – August 2000

Sponsor Information:
Janet Viniski
Phone: 215 814 2999
Fax: 215 814 2905
E-mail: viniski.janet@epa.gov

Computer Programming and Development

Topics in this category include the development of computer software that can include, for example, the adaptation to PC or Macintosh formats and upgrading existing software packages.

Project Number and Category: 2000-5001 Computer Development

Sponsoring Office: Office of Environmental Data

Office Mission/Responsibility: To provide timely, reliable and meaningful environmental information to the public, EPA staff, and state and local governments

Project Description:

1. Gather environmental information from different databases and other sources about the Mid-Atlantic's environmental condition (both past and present).
2. Translate the data into non-technical descriptive graphics.
3. Develop a report documenting how the Mid-Atlantic's environment has changed in the last 25 years.

Knowledge of Lotus WordPerfect, Freelance, and Lotus 123 and/or Microsoft Word, PowerPoint and Excel is preferred.

Project Goals:

The report produced by the student will be used to inform the public and other audiences of the Mid-Atlantic's environmental status in a clear, non-technical and meaningful manner.

Student will learn how to develop meaningful information about regional environmental status by performing database searches; extracting information; and producing charts, graphs and other visual presentations.

Student will gain first-hand knowledge and understanding of the problems and solutions surrounding information visualization, have an opportunity to enhance skills in data analysis and database development, and gain appreciation for the importance of information technology in large, complex organizations.

Student will enhance skills in interacting with highly educated and skilled staff, acquire basic understanding of environmental problems and solutions.

Desired Level of Education: Senior or 1st year graduate student

Project Location: EPA Region 2, Philadelphia, PA

Preferred Project Period: June 2000 – September 2000

Sponsor Information:

Stuart Kerzner
Phone: 215 814 5709
Fax: 215 814 5718
E-mail: kerzner.stuart@epa.gov

Project Number and Category:	2000-5002 Computer Development
Sponsoring Office:	Office of Compliance & Enforcement
Office Mission/Responsibility:	Sewer Collection System GIS Mapping
Project Description:	Project consists of digitizing maps and assisting in GIS operations.
Project Goals:	The goal of the project is the development of a countywide GIS system for drinking water and sewers.
Desired Level of Education:	Sophomore
Project Location:	EPA Region 3, Pittsburgh, PA
Preferred Project Period:	Summer 2000
Sponsor Information:	Robert J. Sanchez Phone: 215 814 3451 Fax: 215 814 2302 E-mail: sanchez.robert@epa.gov

Project Number and Category: 2000-5003 Computer Development

Sponsoring Office: Office of Research and Development

Office Mission/Responsibility: Research and Development

Project Description: Student will explore, develop, and program in-house and other hypothesized exact symbolic solution approaches to scaler and low-dimensional systems of nonlinear ordinary differential equations (ODEs) associated with physiologically based pharmacokinetic (PBPK) exposure-dose models that describe the uptake and distribution of environmental toxicants in the human body and surrounding microenvironment. ODE type PBPK models typically consist of well-stirred compartments (organs in the body or rooms of the home) described by predominantly linear inter-compartmental transfer rates, but occasionally by saturable nonlinear Michaelis-Menten type transfer rate equations that reduce to linear ODEs at low toxicant input rates or low internal compartmental concentrations. Symbolic solutions will be programmed using standard symbolic algebra software, but traditional simulation software will also be used to validate the numerical accuracy, efficiency, and usefulness of symbolic approaches. Mathematical solutions forms will emphasize qualitative as well as quantitative aspects of system solution behavior and environmental risk assessment application. Approximate, truncated solutions to exact solutions will also be explored. Results of research will be prepared and submitted to peer-reviewed journals and should help to improve the scientific foundation of future environmental exposure-dose risk analyses.

Project Goals: Student will review, reprogram, modify, graph, and simplify proposed in-house symbolic time dependent solutions following simplified inputs (e.g., one-time bolus mass inputs or perhaps simpler constant infusions) for single Michaelis-Menten type ODE equations using MAPLE (or Mathematica). Student will explore numerical stability, accuracy, convergence, and truncation bounds of proposed solutions or approximations. Student will compare results with traditional general purpose numerical ODE solver solutions using the MATLAB/SimuLink simulation system and toolboxes. Student will explore hypothesized symbolic solution extensions to more difficult 2x2 mixed linear/nonlinear ODE systems. Student will have opportunity to explore and develop innovative approaches to the exact or approximate solution of low-dimensional ODE systems using basic ideas from calculus, matrix algebra, complex variable, differential equation, and graph theory. Student will participate as co-author of submitted research papers and will utilize Scientific Word/Workplace technical word processing software to summarize results for publication. Student will interact frequently with EPA Sponsor to discuss conceptual mathematical solution feasibility issues and optimal algorithmic implementation strategies.

Desired Level of Education: Sophomore or above

Project Location: Las Vegas, NV

(continued on next page)

Preferred Project Period: June 2000 – September 2002 or 2003 Part-time;
(To 2003 if available summers only)

Sponsor Information:

Robert N. Brown
Phone: 702 798 2214
Fax: 702 798 2261
E-mail: brown.robert@epamail.epa.gov

Application Materials

Please photocopy pages from this section as needed. Remember to submit one original and three copies of each form/document required and attach the appropriate cover sheet.

APPLICATION CHECK SHEET – GRADUATE LEVEL

Please complete and submit one check sheet per NNEMS project application. This form may be photocopied.

Project Applied For

#2000 — _____

If you are applying for more than one project, what is your preference for this project?

____ of ____ Total Project Applications

Applicant Information

Name: _____

Home Phone: _____

Home Address:

_____

_____

_____

_____

School: _____

School Phone: _____

School Address:

_____

_____

_____

_____

E-mail Address: _____

General Eligibility

- ❑ Currently enrolled in program directly related to pollution abatement and control
- ❑ Completed one semester of graduate work OR four undergraduate courses relating to the environmental field
- ❑ U.S. Citizen **OR** permanent resident (indicate which status applies): _____
- ❑ Will be enrolled in graduate school for the duration of the fellowship period
- ❑ Expected date of graduation _____

Application Data

Research Project Proposal Form	❑ Original	❑ 3 Copies
NNEMS Disclosure and Waiver Statement	❑ Original	❑ 3 Copies
Resume	❑ Original	❑ 3 Copies
Official college transcript **for each school attended**	❑ Original	❑ 3 Copies
Letter of reference from a faculty member	❑ Original	❑ 3 Copies

APPLICATION CHECK SHEET – UNDERGRADUATE LEVEL

Please complete and submit one check sheet per NNEMS project application. This form may be photocopied.

Project Applied For

#2000 -- _____

If you are applying for more than one project, what is your preference for this project?

____ of ____ Total Project Applications

Applicant Information

Name: _____

Home Phone: _____

Home Address:

_____

_____

_____

_____

School: _____

School Phone: _____

School Address:

_____

_____

_____

_____

E-mail Address: _____

General Eligibility

- ❑ Currently enrolled in program directly related to pollution abatement and control
- ❑ Completed four courses relating to the environmental field
- ❑ U.S. Citizen **OR** permanent resident (indicate which status applies): _____
- ❑ Current grade point average (GPA) _____ on a scale of _____
- ❑ Will be enrolled in school for the duration of the fellowship period
- ❑ Expected date of graduation _____

Application Data

Research Project Proposal Form	❑ Original	❑ 3 Copies
NNEMS Disclosure and Waiver Statement	❑ Original	❑ 3 Copies
Resume	❑ Original	❑ 3 Copies
Official college transcript **for each school attended**	❑ Original	❑ 3 Copies
Letter of reference from a faculty member	❑ Original	❑ 3 Copies
Verification of fall enrollment in graduate school (graduating seniors only)	❑ Original	❑ 3 Copies

NNEMS RESEARCH PROJECT PROPOSAL FORM (SAMPLE)

Please type. This form may be photocopied.

Project Number and Category: 2000 - _____ ____ **Expected Graduation Date:**

_____

Applicant Name _____ ____ **Major Advisor**

_____

University _____ ____ **Advisor's Department**

_____

Home Address _____ **Advisor's Phone**

_____

Applicant Phone _____ **Best Time to Reach Applicant**

_____

Project Description: ***Briefly restate the project description. Include the project question, if applicable.***
What are the international organizations (i.e. World Bank, Agency for International Development, International Union for the Conservation of Nature) doing to protect wetlands and what more can they do?

Proposed Research Plan: ***Briefly describe how you would conduct your research on this project.***
Some well-placed phone calls can save a lot of time in the library, so my investigation would begin with a week or two of phone interviews with a range of people already familiar with (1) wetland protection issues, and (2) the impact of USAID, World Bank and IUCN policies on environmental media. I would include USAID and World Bank program officers, UNEP officers, UNEP officials, public interest organizations with international environmental programs, and academic specialists, as well as people within EPA.

Then I would select three or four organizations to represent the range of agencies active internationally (Bilateral, Multilateral, Quasigovernmental). I would look at specific programs or projects currently under way at these agencies to assess wetland impact. I would also analyze the organizational structures and political context in which these agencies operate to gain a grasp of how these factors influence their projects on wetlands, as well as the legal authorities of these agencies.

At this point, I would be starting to consider possible changes in the policies that might bring about effective wetlands protection. I would look closely at any environmental protection provisions already incorporated into formal guidelines of these agencies to see if any could be applicable to wetland protection. For instance, USAID requires a type of environmental impact report before its funds can be used to purchase pesticides. The World Bank has guidelines which mandate similar assessment before pesticides are to be used. EPA and State efforts to protect wetlands might also suggest international policy options. Research period is June 1 - August 30, 2000.

Expected Goals: ***Briefly describe your expected goals.***
I would expect my end project to be a report summarizing the impacts these agencies are having on wetlands, along with a substantive analysis of the legal and political factors driving these impacts. The report would also include specific recommendations for policy changes.

Relevant Information: ***Describe your academic and/or professional experience or interests that qualify you to conduct this research.***
Though I do not have a background in wetlands or water issues in general, I have been working for the past five years on international pesticide issues. I am already familiar with some of the mechanisms currently in place at the World Bank and USAID to regulate how their funds are used for pesticides. Last year, I wrote Problem Pesticides, Pesticide Programs and Analysis of the International Code of Conduct on the Distribution and Use of Pesticides approved in November 1986 by the FAO, as well as a guide on how to monitor for compliance with the code.

Academic Goals: ***State how you expect this project to support your academic and professional goals.***
This project would allow me to gain hands-on experience in international policy as it relates to environmental issues, which dovetails with the Environmental Management program I am pursuing. This real world experience would reinforce the topics I have studied in school, allow me to explore wetlands issues in more depth, and give me crucial background experience to help me find a job in the environmental public policy field upon graduation.

NNEMS RESEARCH PROJECT PROPOSAL FORM

Please type. This form may be photocopied.

Project Number and Category: 2000 - _____ ____ **Expected Graduation Date:** _____

Applicant Name _____ ____ **Major Advisor** _____

University _____ ____ **Advisor's Department** _____

Home Address _____ **Advisor's Phone** _____

Applicant Phone _____ **Best Time to Reach Applicant** _____

Project Description: ***Briefly restate the project description. Include the project question, if applicable.***

Proposed Research Plan: ***Briefly describe how you would conduct your research on this project.***

Expected Goals: ***Briefly describe your expected goals.***

Relevant Information: ***Describe your academic and/or professional experience or interests that qualify you to conduct this research.***

Academic Goals: ***State how you expect this project to support your academic and professional goals.***

NNEMS DISCLOSURE AND WAIVER STATEMENT

Please complete and submit with NNEMS application package. This form may be photocopied.

I understand that the National Network for Environmental Management Studies (NNEMS) Program fellows are not employees of the U.S. Environmental Protection Agency (EPA) or the U.S. government. Thus, if selected to be a NNEMS fellow, I will not receive typical federal employee benefits including, but not limited to, health insurance, life insurance, annual leave and sick leave.

In addition, I understand that in the event of an accident causing injury to myself while either performing my assigned functions or traveling, the U.S. government is not liable for any injury or harm I may incur. Further, I understand that the U.S. government is not liable for any injury or harm I may cause another person or persons while performing my assigned functions or traveling for EPA. As such, I understand that I am responsible for any injury or harm I cause to myself or others as a result of my actions.

By signing this form, I acknowledge that I fully understand the provisions contained in this statement regarding my status as a NNEMS fellow and the consequences of my actions while working as a NNEMS fellow. As a result, I have considered the possibility of obtaining personal insurance to cover me during my NNEMS fellowship.

Name: _____

Home Address:

_____

_____

_____

School : _____

Home Phone Number: _____

Project # Applied For: 2000 - _____

Project Category: _____

Signature: _____

Date: _____

For More Information

For more information write or call:

Sheri Jojokian
NNEMS Program
US EPA (1704)
401 M Street SW
Washington, DC 20460

Phone: (202) 260-5283
FAX: (202) 260-4095

Or visit our Web site at:

http://www.epa.gov/enviroed

Recycled/Recyclable
Printed with Vegetable Oil Based Inks on
100% Recycled Paper (20% Postconsumer)

United States
Environmental
Protection Agency
(1704)
Washington, DC 20460

Official Business
Penalty for Private Use
$300

Recycled/Recyclable
Printed on paper that contains
at least 50% recycled fiber